5-1993

Parenting Style and Child Behavior Problems: A Longitudinal Analysis

Margaret H. Young
Utah State University

PARENTING STYLE AND CHILD BEHAVIOR PROBLEMS:

A LONGITUDINAL ANALYSIS

by

Margaret H. Young

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Family and Human Development

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1993

DEDICATION

To my children--who were (and are)
the kind of kids parents dream of having.
You taught me first-hand about parenting.

ACKNOWLEDGMENTS

Although one name appears as author, the completion of a dissertation is not an individual process; it requires a team effort. I would like to thank the members of my committee, Dr. Shelley Lindauer, Dr. Don Sisson, and Dr. Steven Fulks, for their support and encouragement; with special thanks to Dr. E. Helen Berry for her help with the final analyses of this project. Thanks to Maria Norton for the time she spent helping me with this project. Her statistical expertise and computer skills were invaluable. Thanks also to BYU faculty members, Dr. Tim Heaton and Dr. Bryan Barber, for their ideas and help in operationalizing the constructs for this study and for their advice on LISREL analyses. To Dr. Jay Schvaneveldt and Dr. Brent Miller, you are the finest examples of mentors, friends, and models. I extend to both of you my deepest appreciation for your time, patience, and expertise in helping me to reach this goal.

Margaret H. Young

CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

Parenting Style and Child Behavior Problems:

A Longitudinal Analysis

by

Margaret H. Young, Doctor of Philosophy

Utah State University, 1993

Major Professors: Dr. Brent C. Miller
Dr. Jay D. Schvaneveldt
Department: Family and Human Development

Data from the National Survey of Children were used to study the relationships between children's perceptions of parental support and control and measures of self-esteem and behavior problems over time. Data were collected in 1976, when the children were aged 7-11; 1981, when the children were in their early to mid teens (age 12 to 16); and 1987, when the children were in their late teens and early 20s (age 17 to 22). Parenting measures, based on children's reports, were developed for each wave from items included in the data; constructed variables measuring self-esteem and internal and external expressions of behavior problems were also comprised of individual items drawn from each wave of data. Preliminary analyses showed that parental support was positively correlated to children's self-esteem and negatively related to behavior problems. Although the

parental control measures had little effect on the outcome variables, the effect that was present showed that parental coerciveness, rejection, and permissiveness were negatively correlated with children's self-esteem, while being positively associated with both internal and external behavior problems. The preliminary results also showed that the parental effects of mothers and fathers differed for daughters and sons. LISREL analyses were done in an effort to more fully investigate the interactive effects between the constructed variables of interest. Generally, the measures were related as expected, although the relationships were not as strong as anticipated. Of the parenting measures, parental support showed the strongest effects on child outcomes; parental control measures had very little effect on children's self-esteem or behavior problems. In 1987, parenting style had virtually no effect on youths' self-esteem or on behavior problems. For this wave, self-esteem was the strongest predictor of behavior problems in young adults. (168 pages)

CHAPTER I

INTRODUCTION

Parent-Child Relationships

From antiquity to the present, parent-child relationships have generated considerable interest. In the past few decades, extensive research, focusing on parents and children, has produced a large and rich literature. Parents and professionals continue to be interested in understanding how parenting practices influence children's behavior and the impact that early experiences have on later behavior.

Social and behavioral scientists consider parent-child interaction to be particularly important, because no other relationship has such a significant influence on an individual's life. Compared to other human relationships, the parent-child relationship is distinctive because of its enduring nature and the time, commitment, and obligation that are necessary to nurture a child (Hollier, 1989). And while all interactions between parents and their children affect both in some way, because of the parents' status, their influence on children is by far the most powerful (Anderson, Lyttonn, & Romney, 1986; Clarke-Stewart & Apfel, 1978; Elder, 1960; Grusec & Kuczynski, 1980; Hoffman, 1967; 1984).

Justification for This Research

A number of problems have plagued researchers studying parent child relationships. First, the lack of clear definitions of constructs and variables has been problematic for those using existing parent-child research as a basis for studying the effects of parental practices on child outcome (Steinmetz, 1979). Secondly, prior studies, for the most part, either used small unrepresentative samples and/or were cross-sectional in design. These studies were therefore unable to capture the longitudinal aspects of parent-child relationships. Finally, a number of studies relied primarily on only one source of information (usually the parent) to determine parenting style.

On the positive side, during the past decade measures of parenting have improved and become more sophisticated (e.g., see Barber, Chadwick, & Oerter, 1992; Barber, Olsen, & Shagle (in press); Hetherington & Clingempeel, 1992; Hollier, 1989). Furthermore, an increase in national surveys that include child information has made it possible to analyze larger, more representative samples of children and their families. The National Survey of Children (NSC) is one example of longitudinal studies that repeatedly survey children and their families. Three rounds of data were collected in 1976, 1981, and 1987. The NSC was designed to assess the social, physical, and psychological

characteristics of United States children and their families over time. The NSC data provide variables that tap family processes as well as children's behaviors. (Refer to Chapter III for a more comprehensive description of the NSC.) Other surveys that are large scale in nature, and utilize nationally representative samples (e.g., Dawson, 1991) usually do not address the interpersonal aspects of parent-child relationships to the extent that the NSC does. Based on recent work in the field, drawing upon the rich theoretical background of parent-child relationships, and having access to a broad data base, it was anticipated that parenting constructs could be measured more precisely and defined more clearly than has been done previously.

Considering the problem of cross-sectional data collection, Maccoby and Martin (1983) reflected that "one of the major concerns of students of parent-child interaction has been to find means of describing and tracing how interactions are patterned through time, and to use information on moment to moment actions and reactions to derive adequate descriptions of relationships" (p. 14). Again, the NSC data provided a means of studying the effects of parenting style on child outcomes within and across time periods.

Another obstacle in studying parent-child relationships is related to family structure. Other longitudinal studies

that addressed similar issues and covered a comparable period of time (Hetherington, 1980; Hetherington, Cox, & Cox, 1986; Wallerstein, 1985, 1990; Wallerstein & Kelley, 1976) focused primarily on children who were growing up in divorced or separated families. Limited data were available comparing children in disrupted families with those from intact or other types of families (although see Cherlin, Furstenberg, Chase-Lansdale, & Kiernan, 1991; Hetherington & Clingempeel, 1992; Hollier, 1989). Moreover, as mothers were most likely to be the custodial parent in these families, information on fathers' influences on their children is notably lacking.

There is another point of interest--while considerable information is provided regarding parenting style and child outcomes in these studies, the influence of inner resources of the child are not addressed to any great extent. Yet children's self-esteem and resiliency appear to be important intervening variables when predicting child behaviors (Brynner, O'Malley, & Bachman, 1981; Flavell & Ross, 1981; Garmezy, 1976; McCarthy & Hoge, 1984; Shagle & Barber, 1993; Wells & Rankin, 1983). In addition to studying various types of families, it would be desirable to analyze the influences of parenting practices on children's behaviors directly and indirectly through the child's self-esteem.

Purpose of the Study

The purpose of this study was to examine parenting style as it relates to children's self-esteem and behavior problems over time. To accomplish this, longitudinal data from the National Survey of Children (NSC) were used to: (a) develop measures of parenting style--specifically support and control; (b) examine the effects of parental support and control on behavior problems in children over time; (c) study the correlation of different parenting styles with specific manifestations of behavior problems (i.e., internal and external) in children; (d) evaluate the intervening effects of children's self-esteem between parenting practices and behavior problems; (e) examine differences between boys and girls, including parental treatment, self-esteem, and types of behavior problems, (f) evaluate boys' and girls' responses to different parenting styles; and (g) consider the effects of mothers' versus fathers' parenting style on child outcomes.

The major goal of this study, then, was to study the relationship between maternal and paternal parenting styles, children's self-esteem, and internal and external expressions of behavior problems in boys and girls. It was believed that by using the large sample and extensive data contained in the NSC that the present research efforts would

clarify and add to the extensive knowledge base now available about parenting practices and child outcomes.

The review of literature in the following chapter begins with an overview of parenting research, focusing on dimensions of parenting styles, parenting typologies, and child outcomes. A brief review of information on behavior problems in children is then provided. Gender differences, both parental and child, are discussed as they influence parenting practices and child behavior. The influence of children's self-esteem as a mediating variable between parenting style and child outcome is then addressed. Finally, the theoretical basis for the study is presented and hypotheses underlying this study are offered.

CHAPTER II

REVIEW OF LITERATURE

Overview

During the past three decades child development and family science researchers have focused on distinguishing between parenting practices that are associated with favorable child outcomes and those that appear to contribute to negative or problem behaviors in children. An overview of major findings and conclusions from the parenting literature is as follows.

First, parenting is a dynamic process that changes over time as children mature; effective parents tend to change their style of parenting to reflect the changing relationship with an older child and in order to allow the child to become more independent (Alexander, 1973; Paikoff & Brooks-Gunn, 1991; Rollins & Thomas, 1975, 1979; Steinberg & Silverberg, 1986).

Second, although biogenetic influences are not completely understood, parent-child relationships are not unidirectional; rather, they are reciprocal, with the temperament and behavior of the child eliciting certain responses from the parent as well as the child reacting to specific parental attitudes and behavior (Cantor & Gelfand, 1977; Grusec & Kuczynski, 1980; Hartup, 1978; Lerner &

Spanier, 1978; Maccoby & Martin, 1983; McCord, 1990; Patterson, 1976; Shaffer & Brody, 1981). However, as noted earlier, because of their status, parents have more influence on their children than vice versa.

Third, a number of antecedent processes combine to influence parents' attitudes regarding parenting and consequently their behavior towards their children. Socioeconomic status, race, cultural influences, personality characteristics, and gender of parents and children are among those factors that influence parenting style and children's responses to it (Becker, 1964; Belsky, 1980; Block, Block, & Morrison, 1981; Booth, 1985; Bronfenbrenner, 1986; Burgess & Conger, 1978; Duke, 1978; Luster, Rhoades, & Haas, 1989; Simons, Whitbeck, Conger, & Melby, 1990; Sorenson & Brownfield, 1991; Youniss & Smoller, 1985).

Fourth, changes in family structure, particularly divorce and remarriage, have a significant influence on both parenting practices and child behavior (see for example, Aro, 1988; Baden, 1980; Bayder, 1988; Clingempeel, Brand, & Tevoi, 1984; Clingempeel & Segal, 1986; Demo & Acock, 1988; Featherstone, Cundick, & Jensen, 1992; Furstenberg, 1987; Ganong & Coleman, 1984; Hetherington, 1980; Hetherington et al., 1986; Hollier, 1989; Kinard & Reinherz, 1984; Wallerstein, 1985, 1990; Wallerstein & Kelly, 1976; Zill, 1988). In sum, the research indicates that children's

behavior may differ depending upon whether they have experienced their parents' divorce and whether they are raised in never-disrupted, single-parent, or remarried households.

Finally, several comprehensive reviews of parenting research have been compiled, most notably those of Becker (1964); Baumrind (1966, 1971, 1972); Clarke-Stewart and Apfel, 1978; Maccoby and Martin, 1983; Peterson and Rollins, 1987; Rollins and Thomas (1979); Walters and Walters (1980); and Demo (1992). The authors of these reviews observed that two dimensions of parenting consistently emerge in the parent-child literature. One dimension consists of the affective characteristics of the parent-child relationship, and the other primarily encompasses disciplinary techniques utilized by the parents. Although terminology and operationalization differ somewhat across studies, according to Rollins and Thomas (1979) the terms "support" and "control" or "control attempts" best describe the two dimensions.

Dimensions of Parenting

Parental Support

"Support," or nurturance, as defined by Rollins and Thomas (1979), consists of "behavior manifest by a parent toward a child that makes the child feel comfortable in the

presence of the parent and confirms in the child's mind that he is basically accepted and approved as a person by the parent" (p. 320). The support construct typically consists of variables such as acceptance, open communication, expressive and instrumental affection, nurturance, rapport, responsiveness, and companionship (also see Alexander, 1973; Barber & Thomas, 1986; Ellis, Thomas, & Rollins, 1976; Hollier, 1989; Rhoner, 1986).

At the time of their review, Rollins and Thomas (1979) described support as a continuous quantitative variable and viewed it as a unidimensional construct. More recently, however, Barber and Thomas (1986) and Rhoner (1986) made a distinction between physical affection and other dimensions of support.

Control

The "control" dimension of parenting has been somewhat more difficult to define and operationalize. Rollins and Thomas (1979) concluded that "control attempts" seemed to be a better way of conceptualizing this construct. They defined control attempts as "behavior of the parent toward the child with the intent of directing the behavior of the child in a manner desirable to the parents" (p. 321).

Conceptually, "control attempts" was viewed as a continuous quantitative variable ranging from verbal requests and explanations to overt physical coercion and

punishment. However, following their review of parent-child literature, Rollins and Thomas (1979) noted that control attempts could be differentiated into three types--coercion, induction (reasoning with the child), and love withdrawal. They further posited a curvilinear relationship between parental control and child conformity; moderate levels of control being positively correlated with child conformity, with very high or very low control attempts resulting in noncompliance by the child (also see Baumrind, 1971; Elder, 1960; Miller, McCoy, Olson, & Wallace, 1986; Rollins & Thomas, 1979; Toner, 1986).

In prior studies, the control construct has included variables that range from ignoring the child to physical punishment. Typically, disciplinary techniques, monitoring behavior, coercion, power, strictness, and level of conflict are among the variables that make up the control construct (refer to Baumrind 1966, 1969; Elder, 1960; Garbarino, 1986; Hoffman, 1967, 1984; Hollier, 1989; Maccoby & Martin, 1983; Patterson, 1982; Rollins & Thomas, 1979).

Operationalizing control in a slightly different manner, Baumrind (1991) reported a study in which three measures of control--Directive/Conventional Control, Assertive Control, and Supportive Control--were developed, and six types of parents were identified. A fourth scale, Intrusive, was used to divide the "directive" types of

parents. Strong relationships between types of parents and subsequent child outcomes were observed.

Expanding the concept of control further, Barber and his colleagues (Barber, 1992; Barber et al., in press) described psychological over-control and behavioral under-control. Psychological over-control included the concepts frequently linked with love-withdrawal, ignoring, and ridiculing the child. Behavioral under-control was associated with behaviors typical of permissive parenting, including lack of monitoring and allowing children to do as they pleased. Theoretically, Barber was able to link psychological over-control with internal behavior problems in children and behavioral under-control with external behavior problems.

The interaction of support and control has provided the basis for a large portion of the research addressing parent-child relationships. In particular, these constructs have been used to develop parenting "typologies" or "parenting styles." Again, although definitions and operationalization varied, researchers described similar styles of parenting behavior.

Parenting Style

In an early study addressing dimensions of parenting style, Schaefer (1959) utilized the concepts of support and

control to create a circumplex model consisting of a warmth/hostility axis and a control/autonomy axis. Parenting was measured along both continuums. Becker (1964) carried this concept further to describe child outcomes related to parenting styles in each quadrant.

Based on this two-dimensional view of parenting, Baumrind laid the groundwork for many of the current studies addressing parent-child relationships. Referring to the two dimensions as "demandingness" and "responsiveness," Baumrind (1966, 1969) first described three parenting typologies--authoritarian, authoritative, and permissive--and later expanded this concept into a four-fold typology that included a rejecting-neglecting category (Baumrind, 1971, 1991). The following is a brief descriptive overview addressing various parenting styles (for elaboration, refer to Baumrind, 1966, 1971, 1980, 1989, 1991; Maccoby & Martin, 1983).

Authoritative parents rate relatively high on both responsiveness and control. While not necessarily restrictive, they do monitor their children and encourage them to be responsible and assertive. In contrast, authoritarian parents are highly controlling but score relatively low on the support dimension. They expect obedience and orderliness and monitor their children closely. Although permissive parents rate low on control,

they score relatively high on warmth. Children are allowed to do pretty much as they please as long as they do not cause problems for the parents. Rejecting-neglecting parents are not responsive to their children, nor do they monitor their behavior. Although some parents in this dimension simply neglect to parent their children adequately, other parents actively reject their children; these parents are the least effective of all of the identified typologies (Baumrind, 1991).

Following a broad review of literature, Maccoby and Martin (1983) concurred with Baumrind's concept of parenting typologies, also describing a four-fold typology of parenting styles. The authoritarian and authoritative parenting styles were analogous to those that Baumrind described. Maccoby and Martin divided permissiveness into two parenting typologies: permissive/indulgent parents who rated high on warmth but low on control, and permissive/neglectful parents who rated low on both control and warmth. In addition to these benchmark studies, contemporary researchers continue to utilize the support and control dimensions of parenting, as well as parenting typologies to explain parent-child relationships (Barber & Thomas, 1986; Bell & Bell, 1983; Hollier, 1989; Kandel, 1990; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Watson, 1989, among others). There is, however, some controversy

about the relative merits of using parenting dimensions (support/control) vs. parenting styles in studies of child outcome.

Parenting Style and Child Outcomes

Although parenting style and behaviors are important in their own right, because of the long-lasting effects on the developing child, the relationship between parenting style and child outcomes has been of particular interest to researchers (Hollier, 1989). Though approaches varied, and operationalization of constructs differed between studies, similar effects of parenting style and child outcomes have been reported.

Overall, the research findings indicate that in homes in which support is high and control is moderately high, and where parents use an authoritative style of discipline, children are generally better adjusted, more friendly, socially mature, perform better in school, and rate higher on self-esteem measures (Barber, 1987; Bartle, Anderson, & Sabatelli, 1989; Barton, Dielman, & Cattell, 1974; Baumrind, 1966, 1978, 1989; Coopersmith, 1967; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Hollier, 1989; Loeb, Horst, & Horton, 1980; Maccoby & Martin, 1983; Rhoner, 1986; Rollins & Thomas, 1975, 1979; Steinberg, Mounts, Lamborn, & Dornbusch, 1991). When parents are nurturant, children are

less likely to be involved in alcohol or drug use, to be sexually active, or to exhibit behavior problems generally (Barnes, Farrell, & Windle, 1991; Foxcroft & Lowe, 1991; Miller et al., 1986). Furthermore, this relationship appears to hold across socioeconomic, racial, and geographic settings (Steinberg et al., 1991).

Children whose parents are power assertive or punitive are more likely to be hostile and overtly aggressive and exhibit other external behavior problems. Restrictiveness and hostility, or "psychological over-control" as described by Barber (1992), is positively correlated with internal manifestations of behavior problems such as neurotic behavior, shyness, social withdrawal, dependency, and self-aggression. These children have lower self-esteem when compared to children growing up in authoritative homes (Becker, 1964; Lamborn et al., 1991). On the other hand, children whose parents are warm but highly restrictive are polite and obedient, but they also tend to be more conforming and passive (Baumrind, 1969; Becker, 1964).

Permissiveness in parenting style has generally been associated with low inhibition and problem behaviors in children (Becker, 1964). Following a review of recent studies, Barber (1992) noted that empirically there appears to be a positive correlation between behavioral under-control (permissiveness) in parents and external problem

behaviors in children, including troublesome behaviors generally, delinquent behavior, and sexual precocity. Windle (1991) also concluded that parental under-control and over-control were both associated with problem behaviors in adolescence.

Along with Maccoby and Martin (1983), Lamborn et al. (1991) argued that it is essential to separate permissive/indulgent parents from those who are permissive/neglectful. Indulgent (warm and permissive) parents have children who are friendly but dependent. These children report more internal behavior problems resulting in a higher level of psychological and somatic symptoms, and they are less socially competent than their peers in other groups. These children are also more likely to engage in substance abuse and exhibit behavior problems at school compared to those raised in authoritative and authoritarian homes. Baumrind (1971) observed that parents who were neglectful discouraged independence in their children while also discouraging emotional dependency. Lamborn et al. (1991) concluded that children raised in a permissive/neglectful atmosphere had the poorest outcomes of the four groups.

Child Behavior Problems

Research addressing problem behaviors in children also has a long history and still generates a great deal of interest among developmentalists, behaviorists, therapists, and family scientists. The work of Achenbach and his colleagues (Achenbach, 1978, 1979; Achenbach & Edelbrock, 1978, 1979, 1981; Achenbach, Howell, Quay, & Conners, 1991) has been particularly influential in this area.

McCord (1990) wrote that no one theory completely explains why children exhibit behavior problems. She also stated that there is not complete agreement when it comes to interpreting interrelationships among different problem behaviors. However, it is generally agreed that problem behaviors are expressed both internally and externally (also see Cicchetti & Toth, 1991). External manifestations include such behaviors as aggressiveness, delinquency, and substance use, while internal expressions include depression, anorexia, and other behaviors that may not be readily apparent to the observer.

In considering the relationship of parenting style and behavior problems McCord (1990) reported that power-assertion and punitive discipline were positively related to external behavior problems, and that permissiveness and/or inconsistent rules were correlated to internal manifestations of problem behaviors. In contrast, Becker

(1964) and Barber (1992) found permissive parenting to be positively associated with external behavior problems.

Although problem behaviors may dissipate as the child matures, aggression and behavior problems in childhood and adolescence have been found to correlate positively with more serious problem behaviors later on in adolescence and adulthood (Kandel, 1990; McCord, 1990; Patterson, 1986; Spivack & Cianci, 1987; Windle, 1991).

Gender Differences

A great deal of literature exists confirming that boys and girls are socialized differently as they grow and mature within their families and in society in general. Parents have different expectations of boys and girls, and in most families, sons and daughters are treated differently by their parents (Block et al., 1981; Cantor & Gelfand, 1977; Huston, 1983; Johnson, 1963, 1977; Maccoby & Jacklin, 1974). Furthermore, prior studies indicate that fathers and mothers interact with their children differently, and are perceived differently by their sons and daughters (Armentrout & Burger, 1972; Simons et al., 1990; Sorenson & Brownfield, 1991; Youniss & Smollar, 1985). Although both parents are capable of expressive and instrumental behaviors, mothers tend to be nurturing to both sons and daughters, whereas fathers are more likely to be nurturing to their daughters.

There is also some evidence that maternal-child relationships are more predictive of child outcome when compared to father-child interaction (see Hollier, 1989; Kandel, 1990). Based on these findings, examining the interdependence of father's and mother's parenting style with the child's gender is clearly an important consideration when designing research addressing parent-child relationships (Bartle et al., 1989; Clarke-Stewart & Apfel, 1979).

Prior research also shows that boys and girls react differently to specific parenting styles. For example, authoritarian parenting appears to have more deleterious effects on boys than girls, whereas unconditional permissiveness seems to affect girls more negatively (Baumrind, 1966, 1971, 1989). Overall, research in this area indicates that girls are more resilient than boys in a nonfacilitative environment. Perhaps part of the reason that this is so, is that girls are more likely to be supported than are boys. Boys are also more likely to be exposed to conflict and to be the target of hostility (Hetherington, 1980; Hetherington et al., 1986).

Differences are also apparent in how behavior problems are expressed by boys and girls when they are distressed. Because boys are socialized to be aggressive, and girls are expected to be passive, behavior problems in boys are more

likely to be overtly expressed; aggression, noncompliance, and delinquency are more common in boys. In comparison, girls are more likely to react to tension by internal expressions of behavior--withdrawing, becoming depressed, or by being overobedient, although there is some evidence to suggest that girls are now acting out more overtly than in previous generations (Achenbach et al., 1991; Block et al., 1981; Duke, 1978; Hollier, 1989; Maccoby & Jacklin, 1974; Thornburg, 1986; Wallerstein, Corbin, & Lewis, 1988; Whitehead, 1979).

Self-Esteem as a Mediating Construct

A considerable amount of research addresses the importance of self-esteem as a mediating construct between parent-child relationships and later behaviors in children (e.g., see Brynner et al., 1981; McCarthy & Hoge, 1984; Wells & Rankin, 1983). First, researchers have reported that parenting style contributes to children's self-esteem (Barber, 1987; Barber et al., 1992; Barber & Thomas, 1986; Bell & Bell, 1982, 1983; Coopersmith, 1967; Demo, Small, & Savin-Williams, 1987; Felson & Zielinski, 1989; Gecas & Schwalbe, 1986). The findings of these and other researchers indicate that parental support is a powerful antecedent in the development of a positive self-esteem in children. In contrast, a curvilinear relationship appears

to be present between parental control attempts and self-esteem, with very high and very low levels of control being negatively related to self-esteem.

Still another group of researchers have studied the effects of children's self-esteem on their behavior. The overall findings show that children who have a positive self-esteem are better able to weather problems arising in the parent-child relationship and are less likely to exhibit behavior problems (Brynner et al., 1981; Flavell & Ross, 1981; Garmezy, 1976; McCarthy & Hoge, 1984; Murphy & Moriarty, 1976; Wells & Rankin, 1983; Werner & Smith, 1982). Taken together, the studies show that self-esteem mediates children's responses to parenting behavior.

In sum, considering the question of what makes the difference in child outcomes, existing research suggests that individual characteristics, family processes, and contextual circumstances all contribute to the expression of behavior problems in children. To this point, an attempt has been made to review pertinent research related to the goals and purposes of this study. However, it is also important to interpret this literature in a theoretical context. The intent now is to provide a theoretical framework in which to consider the concepts underlying this study.

Theoretical Considerations

This study is approached primarily from the symbolic interaction standpoint, particularly with regard to parents' and children's perceptions of parenting styles. Symbolic interaction (SI) theory has frequently been used to explain parent-child relationships, in that parental behavior demonstrates to the child whether or not he or she is a person of worth, and this in turn influences subsequent behaviors in the child (Barber et al., 1992). This phenomenon is commonly referred to as the "looking glass self" (Cooley, 1902/1956). For a comprehensive overview of SI theory, refer to Burr, Leigh, Day, and Constantine, 1979 and LaRossa and Reitzes, 1993.

Another tenet of SI theory is the idea put forth by Thomas--that what one perceives to be real becomes real in its consequences (Thomas & Znanieki, 1918). Based on this principle, the child's perceptions of family relationships should be better predictors of both self-esteem and later behaviors than the perceptions of others--including the parents (see Amato, 1987).

In line with that argument, current researchers (including Gecas & Schwalbe, 1986; Hollier, 1989; Miller et al., 1986) found marked differences between parent reports and children's reports of parenting style. With respect to authoritarianism, children's reports were more negative than

were those of their parents; and whereas mothers may have considered themselves as being authoritative, often their children viewed them as permissive. Steinberg et al. (1991) argued that regardless of how parents classified themselves, it was the children's perception of parenting style that was most predictive of outcome (also see Clark-Lempers, Lempers, & Ho, 1991).

Social learning theory is also closely associated with parent-child relationships. Proponents of this theory assert that children tend to model their parents' behavior; in other words, parenting style is reflected in children's attitudes and behavior (see Bandura, 1977; Baumrind, 1971; Damon, 1988; Hoffman, 1967, 1984). A specific example of modeling in this study would be a positive correlation between coercive behaviors by parents and the expression of external behavior problems by their children. From the social learning perspective, one can also tap children's perceptions of parenting style by their desire (or lack of it) to be like their parents (see Elder, 1960). For this study, both theoretical perspectives are important in understanding how parenting influences child behavior.

Based on the preceding review of research, and with the theoretical premises of this study in mind, the concepts underlying this research can be stated in the format of formal hypotheses. The following research hypotheses

provided the foundation for the analyses conducted in this study.

Research Hypotheses

Hypothesis 1: Fathers and mothers differ in approaches to parenting their sons and daughters. Specifically, mothers are more nurturing to both sons and daughters.

Hypothesis 2: Fathers are more coercive in their approach to parenting, whereas mothers are more likely to use emotional means (i.e., rejection and love withdrawal) of controlling their children.

Hypothesis 3: Fathers and mothers parent their sons and daughters differently. Specifically, parents are more likely to be supportive of their daughters compared to their sons.

Hypothesis 4: Parents are more likely to use coercion to discipline their sons compared to their daughters.

Hypothesis 5: Boys and girls rate themselves differently on self-esteem measures, with boys rating themselves higher on these measures than girls.

Hypothesis 6: Behavior problems are expressed differently by boys and girls, with external (overt) behavior problems being more common in boys and internal expression of behavior problems being more characteristic of girls.

Hypothesis 7: Parental support is positively related to children's self-esteem.

Hypothesis 8: Parental coercion, rejection, and permissiveness are negatively related to children's self-esteem.

Hypothesis 9: Parental support is negatively related to children's behavior problems.

Hypothesis 10: Parental coercion, rejection, and permissiveness are positively correlated to behavior problems in children.

Hypothesis 11: Positive self-esteem is negatively related to children's behavior problems.

CHAPTER III

METHOD

Description of the National Survey of Children

Data from the National Survey of Children (NSC) were used for this study. The NSC was a three-wave longitudinal study carried out by the Foundation for Child Development (Wave 1) and Child Trends, Inc. (Waves 2 and 3). The three waves of data were collected in 1976, 1981, and 1987. Respondents included children, a primary caretaker (usually the mother), and one of the children's school teachers.

The original survey was designed to assess the social, physical, and psychological characteristics of United States children and their families. Child development and well-being, along with observing trends over time, were of particular interest to the investigators. Along with characteristics of both children and their parents, the survey included extensive demographic information. Data in the first wave were collected via personal interviews with the child, a parent or guardian (usually the mother), and the child's teacher. Data in the second wave were collected through interviews, primarily by telephone, with children and their parents, and through mailed questionnaires to the child's teacher. In the third wave, youth and their parents (when possible) were reinterviewed.

Sample

The Wave 1 sample consisted of a nationally representative sample of 2,301 children aged 7 to 11 years. The second wave sample included all children (age 12 to 16) who were living in high-conflict families plus a random sample of children who came from low-conflict families (N = 1,423). For the third wave, participants in the second wave were traced when they were 17 to 22 years of age (N = 1,147). The sample analyzed in this study was drawn from the 1,147 children who were represented in all three waves of the NSC. Although the original goal was to study children growing up in diverse family settings, given the complexities of family structure and the fact that information on fathers was paramount, only data from children growing up in never-disrupted, two-parent families were analyzed. Comparing children of different races was also of interest. However, because of the very small numbers of non-white children living in two-parent families, only Caucasian children were selected for analyses. Approximately 96% of the adult respondents who provided information about the child were females (in the subsample for this study, mothers) with males (fathers) providing information on the remaining 4% of the sample. *T* tests were done to compare responses of mothers and fathers on both family process and outcome variables to help determine if

mother-father data should be aggregated. Because statistically significant differences were observed between mother-father reports, only those cases in which the mother provided information were retained for analyses. The final sample for analyses consisted of 532 Caucasian children in never-disrupted, two-parent families; 268 (50.4%) were boys and 264 (49.6%) were girls. Slightly more than half (52%) of the children were living in low-conflict families, with 33% living in families in which there was moderate conflict, and 9% of the children were living in high-conflict families (see Peterson & Zill, 1986 for comparison). Approximately three-fourths (74.8%) of the children were growing up in middle-income families.

Measures

The instruments for this study included measures of children's perceptions of parental support and control, measures of children's self-esteem, and measures of child behavior problems. Initially, family process (support and control) measures were developed from data in the first wave, as the sample from that wave was larger, more representative, and included all of those participating in Waves 2 and 3. All of the final measures, however, were developed from the three-wave data that included those who had participated in all three rounds of data collection (N =

1,147 children and their families). Separate discussions of measurement development for each area are now provided.

Parental Support and Control Measures

The family process instruments for this study were drawn from children's reports and consisted of parental support items selected from all three waves of data and parental control items selected from Waves 1 and 2. No control items were available in Wave 3 data. Items selected for constructing the parenting measures were similar in most respects to those described and utilized in prior studies (e.g., see Baumrind, 1966, 1969, 1971, 1978; Ellis et al., 1976; Dornbusch & Ritter, 1991; Dornbusch et al., 1987; Felson & Zielinski 1989; Hollier, 1989; Simons et al., 1990, among many others).

Another consideration for developing the two measures was whether or not to utilize data on both parents. Although at least two studies (Hollier, 1989; Kandel, 1990) reported that maternal information was more predictive of child outcome, based on the review of literature, it was thought that information on both parents was critical in determining child outcomes. Unfortunately, data on fathers in the 1976 data set were virtually nonexistent, with only two support items and two control items available for analysis. Moreover, data provided in Wave 3 were limited to

items that measured support; no control items were included in these data.

Assuming that prior research is accurate in assessing differences between children's and parents' reports, and taking the interactionist stance that the child's perceptions are more predictive of behavior (Gecas & Schwalbe, 1986; Hollier, 1989; Miller et al., 1986), the child's report of parenting behaviors was utilized to develop the parenting measures.

Child Self-Esteem Measures

Modified versions of Rosenberg's self-esteem scale were included in the first and third waves of data. The items differed somewhat across waves, as they addressed children's self-esteem when they were young and later when they were in their late teens and early twenties. Although a formal self-esteem scale was not included in Wave 2, items that measured the child's satisfaction with himself or herself were drawn from these data.

Measures of Child Behavior Problems

Modified versions of The Behavior Problems Index developed by Zill and Peterson of Child Trends Inc. (Zill, 1990) were included in all three rounds of data collection. The scales included items drawn from the Achenbach Behavior Problems Checklist (Achenbach & Edelbrock, 1981) along with

other child behavior scales (Graham & Rutter, 1968; Kellam, Branch, Agrawal, & Ensminger, 1975; Peterson & Zill, 1986; Rutter, Tizard, & Whitmore, 1970). For this study 10 items were utilized from the first wave data, 25 items from the second wave, and 17 items from the third wave.

Behavior problems were further classified as being either "internal" or "external" in nature. Based on earlier studies in this area (refer to Barber, 1992; Barber, Olsen, & Shagle, in press; Cicchetti & Toth, 1991; McCord, 1990), items in the general behavior problem indexes were assigned to one or the other category.

Analyses

Parental Support and Control Measures

After selecting variables thought to tap parental support and control, frequencies were run on each variable, missing values were declared, and the items were recoded and scored so that a high score reflected high support or high control. Scores were created for constructed variables measuring overall support and control by computing the sum of all items included within the measure and substituting for missing data the respondent's mean score when at least 75% of the items had valid data. Factor analyses (principal components with both orthogonal and oblique rotations) were done on the entire list of items in order to make sure that

the items loaded together in the manner expected--support items loading together and control items loading with each other. Reliabilities were run on the general support and control measures, and mean scores for the entire sample were then computed for each.

Factor analyses were then run separately for the parental support and control measures, and internal consistency reliabilities were run on each factor that emerged from the analysis. After excluding variables that did not have moderate factor loadings (generally above .40), further factor analyses and reliabilities were run. As items in some of the scales were measured differently, Z scores were created, so that each variable was equally weighted in computing a summed composite score. Scores were created for each constructed variable in the same manner as they were calculated for the general support and control measures. Similar analyses were then conducted on variables selected from the Wave 2 and Wave 3 data.

After computing scores for each measure, correlations were run between support and control measures for both mothers and fathers within and across all three waves of data. Correlational analyses were also run between maternal and paternal support and control measures.

Child Self-Esteem Measures

Descriptive analyses of the items comprising the self-esteem measures were carried out in the same manner as were those for parental support and control. When scores were computed for the scales, a high score indicated that the child had a positive view of him/herself. Z scores were computed for the items in the Wave 2 scale; items for Waves 1 and 3 were scored alike. Cronbach's alpha was computed for each scale, mean scores were calculated, and correlations were run between the three self-esteem measures.

Behavior Problems Indexes

As with the other measures, the variables selected for the behavior problems indexes were analyzed to determine missing values, and items were recoded so that a high score was positively associated with a high level of that particular problem behavior. Scores were first computed for overall behavior problems; in addition, scores were computed for the internal and external behavior problem indexes in all three waves. Again, a high score on the index reflected a high level of behavior problems. Reliabilities were run for each scale, mean scores were calculated, and correlations were run between all of the behavior problem indexes within and across the three waves of data.

Evaluation of Gender Differences

Once the measures of interest for this study were identified, the focus of the analyses was to determine if children perceived differences between their mothers' and fathers' parenting style. In order to accomplish this task, separate analyses were run for boys and girls using paired *t* tests to compare scores for mothers and fathers on each support and control measure available in each wave of data.

In order to determine whether or not boys and girls differed in their perceptions of parental support and control, *t* tests were run to compare their mean scores on the parenting measures. Differences between the effect of mothers' and fathers' parenting behavior on child outcomes were also of interest. After comparisons were made between boys and girls, separate analyses were conducted for each in which correlations were run between maternal and paternal support and control measures and children's self-esteem over all three waves of data. Similar correlations were run to examine the correlations between the parenting measures and children's problem behaviors over time. Finally, correlations between boys' and girls' self-esteem and internal and external behavior problems were examined.

Structural Equation Analyses

At this point in the analyses, the focus turned to examining how different facets of parental support and

control interacted to influence children's outcomes. The intervening effects of children's self-esteem on behavior problems were also of interest. In order to examine the validity of the constructed variables, to evaluate the direction of the relationship of the measures to each other, and to check the overall fit of the proposed models, structural equation analyses were performed.

Maccoby and Martin (1983) noted that in order to assess the effects of parenting behavior on later child outcomes, cross-lagged panel correlation has been used extensively. However, they pointed out that this method of analysis had been criticized (also see Larzelere & Klein, 1987; Rogosa, 1980) and was no longer considered very useful. Maccoby and Martin considered structural equation modeling, which includes both latent and observed variables, to be a more promising approach to analyses (refer to Bollen, 1989; Bollen & Lennox, 1991; Duncan, 1975; Dwyer, 1983). More recently, Menaghan and Godwin (1992) also remarked that maximum likelihood linear structural equation programs (i.e., "hard" models such as LISREL) seemed to be most worthwhile for explaining complex relationships in longitudinal analyses. In their words, "These new methods are a genuine breakthrough; they offer a more comprehensive, elegant, and flexible system that incorporates attention to both measurement errors and the structure of inter-

relationships among constructs" (p. 9). However, these authors pointed out that in order to use this type of analysis effectively, the researcher must have a good theoretical model and be prepared to make explicit assumptions about expected relationships (also see Godwin, 1988; Lavee, 1988).

Properly used, structural equation modeling allows the researcher to develop and test theory and confirm the validity of the constructs being measured (Anderson & Gerbing, 1988). Patterson (1986) identified three characteristics of structural equation modeling that make the approach practical for use in studies similar to the present investigation. First, the investigator must specify an a priori theoretical model in advance. Constructs to be included in the model are hypothesized to function as determinants for dependent or outcome variables--in this instance behavior problems in children. The direct and indirect relationships of all constructs are also incorporated in the model. Second, multiple indicators defining each of the constructs are included in and are necessary for specifying the model. Third, the final analyses provide a precise picture of the relations among constructs within the model as well as the amount of variance accounted for in the criterion variable by the model. A graphic depiction of the model allows the

researcher to see how all of the relationships between constructs fit together. Although numerous restrictions and assumptions must be placed on the data, the LISREL model provides a good view of the overall fit of the theoretical model, gives efficient estimates, and is designed to explain observed covariances (Anderson & Gerbing, 1988; Lavee, 1988). See Barber, 1987; Barnes et al., 1991; and Patterson, 1986, for examples of application of structural equation modeling in similar studies; and for more comprehensive explanations and use of this method of analysis, refer to Barber et al. (in press); Bentler (1980); Bollen and Lennox (1991); Dwyer (1983); Patterson (1986).

This study met the criteria (refer to Godwin, 1988; Lavee, 1988; and Menaghan & Godwin, 1992) for the use of structural equation modeling analyses. The sample is large and representative for the most part, multiple indicators are used to determine the latent variables, and the theoretical premises are based on a long history of research on parenting style and child outcomes.

Because of the complexity of the data, separate models were created for boys and girls. And although earlier studies (e.g., Lamborn et al., 1991; Steinberg et al., 1991) combined responses from mothers and fathers to provide a composite score, as noted earlier, mothers and fathers may differ significantly on their approach to parenting.

Therefore, separate models were also created to show the relationships of maternal support and control and outcomes of sons and daughters, and other models to show the influence of the paternal support and control on daughters' and sons' outcomes. Structural models were developed within each wave of data, resulting in four models for each wave. In addition, models were developed showing the relationship between parenting style in earlier waves and children's outcomes in later waves. These models are described more fully in Chapter V.

Variables included in the models were first selected on the basis of their theoretical relevance as well as the findings from the preliminary factor analyses. Variables included in the final models were identified in the initial LISREL runs, and had squared multiple correlations of at least .20 in order to be retained in the models.

Because of the complexity of the analysis, the results of the preliminary analyses and those for the LISREL analyses are reported in separate chapters. Chapter IV describes the results obtained from the preliminary and descriptive analyses, and Chapter V presents the results obtained from the structural equation analyses.

CHAPTER IV

RESULTS OF DESCRIPTIVE ANALYSES[1]

Construct Development

One of the first steps in the construct development phase of this study was to identify parental support and control variables based on the children's reports. When these items were grouped into general support and control measures, mean scores were calculated for the entire sample (Table 1). Generally, these boys and girls scored their parents relatively high on support and gave them moderate scores for the controlling behaviors. This group of children also scored themselves high on self-esteem, and their parents scored them low on behavior problems overall.

Parental Support and Control

In attempting to develop the clearest and most theoretically and statistically relevant measures, the final parenting measures, drawn from the child's report of parenting behavior, were based primarily on the factor analyses as described in Chapter III. However, in order to obtain equivalent measures between mothers and fathers, and also across the three waves of data, there were some

[1]Note: The tables describing the findings in these analyses are located in Appendix A.

judgment calls and shifting of variables that were departures from the factor results.

Three facets of support were identified following these analyses: **Intrinsic support** included items such as love, trust, and pride that seemed to be indicators of emotional support of the child. **Extrinsic support** was comprised of items that were outward manifestations of parental support including material rewards given to the child. **Time/closeness** consisted of items that measured the child's perception of time spent with and closeness to the parent. Tables 2 through 4 show the variables included in the support measures for each of the three waves of data.

Control constructs, as primarily reported in this literature (e.g., Barber, 1992; Rollins & Thomas, 1979, among others), were somewhat more problematic to measure and describe. However, the following measures were identified through the factor analyses from these data: **Coercion** included variables consistent with authoritarian control attempts; slapping, spanking, and threatening the child were variables included in this measure. **Rejection** was comprised of an item similar to love withdrawal described in earlier research along with ridicule and conflict (arguing and yelling) with the child. A third measure, **permissiveness**, included activities that parents allowed their children to do, and in the second wave, included vague and inconsistent

rules along with low parental monitoring of behavior. **Withdrawal of privileges**, the fourth identified control measure, was another way in which parents disciplined their children. Descriptions of the control measures for 1976 and 1981 appear in Tables 5 and 6, respectively. (No control measures were developed from 1987 surveys when youth were in their late teens and early 20s.)

Reliabilities were disappointingly low on the 1976 measures. This may have been due to the children's age when these data were collected. In contrast, the 1981 and 1987 measures held together much better; the factors were theoretically and statistically clear, and reliabilities for each measure ranged from moderate to high. In order to evaluate the relationships between the family process variables within and between gender of parent, correlations were run between the support and control measures.

As shown in Tables 7 and 8, child perceptions of parenting behaviors exhibited by mothers and fathers were positively correlated. In other words, children tended to see mothers and fathers as being similar in parenting behavior. This is particularly evident in the 1981 data. Moderate negative correlations were present between the rejection measures and those for the intrinsic support and time/closeness measures. Many of the parenting measures were positively correlated across time (Tables 9 and 10).

For example, maternal intrinsic support in 1976 was positively correlated to maternal intrinsic support in both 1981 and 1987 ($r = .19$, $p < .001$; $r = .09$, $p < .05$). Similarly, maternal intrinsic support in 1981 was correlated with maternal intrinsic support in 1987 ($r = .22$, $p < .001$). As expected, correlations were smaller when more time had elapsed. The correlations were also small because different questions were asked in each wave. The control measures were correlated in a similar manner between waves one and two; no data were available to measure parental control in the third wave.

Self-Esteem Measures

Although the items for the self-esteem measures were drawn from well-known scales, reliabilities were modest at best for all three scales (Cronbach's alpha ranged from .53 to .61). Tables 11 through 13 show the self-esteem items selected for each of the three waves. The constructed variables were positively correlated across time. A modest positive correlation was observed between self-esteem at times one and two ($r = .22$; $p = .00$); as expected a weaker correlation was present between self-esteem at times one and three ($r = .14$; $p = .00$). Self-esteem at times 2 and 3 also showed a modest positive correlation ($r = .24$; $p = .00$). Again correlations were relatively low, because different

questions addressing self-esteem were asked in each wave of data.

Behavior Problems Indexes

When the behavior problems items were divided into the internal and external domains of behaviors, the items held together adequately as evidenced by moderate to high reliability coefficients (Cronbach's alpha ranged from .59 in 1976 to .86 in 1987). Tables 14 through 16 show the items included in each behavior problems index for the 1976, 1981, and 1987 surveys, respectively. Moderate to high positive correlations were noted between internal and external behavior problems within each wave and across time. Table 17 shows the correlation matrix for the behavior problems indexes across the survey rounds.

Maternal vs. Paternal Parenting Styles

Comparisons of Mothers' and Fathers' Supportive Behaviors

The first hypothesis in this study stated that mothers were more nurturing to both sons and daughters. Differences in girls' and boys' perceptions of mothers' and fathers' supportive behaviors were present in all three waves of data. For example, girls rated their mothers higher than fathers on the intrinsic support measure in all three waves of data collection (Table 18). Since data were not available to measure paternal extrinsic support in Wave 1,

comparisons could not be evaluated between mothers and fathers. In 1981, girls viewed their mothers as providing them with more extrinsic support compared to their fathers. The younger girls in Wave 1 rated fathers and mothers equally on the time/closeness measure, but mothers were ranked higher in Wave 2. Data were not available for either of these dimensions in 1987.

In contrast (Table 19), boys scored their parents equally on intrinsic measure in the first and third surveys. However, in 1981, mid adolescent boys rated their mothers higher on this dimension of support. As did girls, in 1981, boys also viewed their mothers as providing them with more extrinsic support compared to their fathers. Data on this measure were not available in 1987. Interestingly, boys in Wave 1 were more likely to feel that their mothers spent enough time with them compared to their fathers. However, in Wave 2, the then adolescent boys indicated that they felt closer to their fathers and that their fathers spent more time with them. Again, data on this measure were not available in the third wave. In sum, in line with Hypothesis 1, both boys and girls ranked their mothers higher on supportive behavior overall.

Comparisons of Mothers' and Fathers' Controlling Behaviors

Hypothesis 2 stated that mothers and fathers differ in how they use control to discipline their children. Following analyses, differences were apparent between boys' and girls' perceptions of their mothers' and fathers' controlling behaviors. Only data from Waves 1 and 2 were examined, as data were not available on parental control in the third wave.

In considering parental coercive behavior, girls rated their mothers higher on this dimension in both 1976 and 1981 (Table 18). Girls also rated their mothers higher on the rejection measure in both rounds of data. Data were not available on the withdrawal of privileges measure for fathers in 1976. However, no statistically significant differences were noted between mothers and fathers on this measure in the second wave of data. Daughters rated their parents about equally on this measure. Data on permissiveness were only available in Wave 2. Interestingly, girls also rated their mothers higher on permissiveness compared to their fathers.

In contrast, boys rated their fathers higher on coercion in 1976, but rated both parents fairly equally in 1981 (Table 19). Along with daughters, sons also rated their mothers higher on the rejection measures in both 1976 and 1981, but rated mothers and fathers similarly on both

the withdrawal of privileges and the permissiveness measures in 1981. No statistically significant differences were noted on either of these measures.

To summarize, when compared to fathers, mothers were viewed, for the most part, as the parent who was most controlling. The portion of Hypothesis 2 stating that fathers are more coercive is not supported; only the younger boys in Wave 1 viewed their fathers as being more coercive. However, the remainder of the second hypothesis is supported in that compared to fathers, mothers were rated higher by both boys and girls on the rejection measure in both 1976 and 1981. As perceived by their children, mothers in this sample were more likely than fathers to use emotional means of controlling their children.

Gender Differences: Comparison of Boys and Girls

Comparison of Boys' and Girls' Perceptions of Parental Support

Hypothesis 3 stated that parents would be perceived as being more supportive by their daughters compared to their sons. When boys' and girls' mean scores were compared on the parental support measures, statistically significant differences were apparent in a number of areas (statistical results are presented in Table 20). For example, as reported previously, both boys and girls rated their mothers higher than fathers on intrinsic support. However, girls in

Waves 1 and 3 viewed their mothers as offering them more intrinsic support than did boys. No significant differences were observed for fathers in either Wave 1 or 3; boys and girls rated fathers equally high on this measure. In contrast, boys in Wave 2 rated their fathers higher on the intrinsic support measure than did girls. No differences by child gender were apparent for mothers on this measure in Wave 2; adolescent boys and girls viewed their mothers similarly.

Mothers were rated equally by boys and girls on the extrinsic support measure in 1976; data were not available on fathers. However, in 1981, adolescent girls rated their mothers higher on the extrinsic support measure than did boys. No differences were observed between boys and girls on fathers' extrinsic supportive behavior in 1981.

In contrast with the observed differences noted between mothers and fathers on the other support measures, boys scored their mothers higher on the time/closeness measure in 1976; mothers were scored equally on this measure by boys and girls in 1981. Conversely, no differences were noted for fathers on the time/closeness measure in 1976, and boys ranked their fathers higher on this measure in 1981. Taken together, these data suggest that parents are perceived by their sons and daughters to be equally supportive of their sons and daughters.

Comparison of Boys' and Girls' Perceptions of Parental Control

In Hypothesis 4, it was posited that parents are more coercive in disciplining sons compared to daughters. The findings from these data indicate that girls, overall, viewed their parents as being more controlling than did boys (see Table 21 for the comparisons on the parental control measures). Compared to boys, girls in Wave 1 viewed their mothers as being more coercive. However, girls also rated their mothers higher on the permissive scale than did boys. No differences were observed between boys and girls for fathers' control in the first wave. In the second wave, girls rated their mothers higher on the rejection measure, while boys in Wave 2 rated their fathers higher on coercive behavior. Mothers in Wave 2 were rated similarly on the coerciveness measure by their sons and daughters. No statistically different findings with respect to child gender were observed on the other parental control measures.

Support for Hypothesis 4 is mixed and appears to be a function of the child's age and perhaps gender of the parent as well. Generally, one cannot conclude from these data that parents use more coercion to discipline their sons compared to daughters.

Boys' and Girls' Self-Esteem

When boys' and girls' self-esteem scores were compared within survey years, no statistically significant differences were noted for the younger children in the first wave nor for the young adults in the third wave. Differences were observed, however, in self-esteem scores in the second wave of data when the children were in their early to mid teens (ages 12 - 16) ($t(523) = 2.24$; $p = .026$); boys scored higher than girls at this time period. Table 22 shows the mean scores and comparisons on each of the self-esteem measures. These findings give limited support to Hypothesis 5, stating that boys would rate themselves higher than girls on self-esteem measures.

Behavior Problems: Comparing Boys and Girls

Hypothesis 6 stated that boys were more likely to exhibit external behavior problems with girls being more prone to internal problem behaviors. Overall, comparisons of girls' and boys' problem behaviors, as reported by their parents in each of the three waves of data, revealed few statistically significant differences (Table 23). In 1976, boys and girls in this sample scored similarly on the internal behavior problems index. As expected, boys in this wave scored higher on external problem behaviors ($t(521) = 1.98$; $p = .048$). In 1981, although girls scored slightly

higher on internal behavior problems, and boys scored somewhat higher on external behavior problems, the differences were not statistically significant. No gender differences were apparent on either measure in 1987.

These findings may be a function of sample characteristics; the majority of children in the sample scored low overall on both the internal and external behavior problems indexes. The discussion now moves from the descriptive findings in each of the domains to the correlational analyses of the constructed measures within and across surveys.

Correlational Analyses

Parental Support and Child Outcomes

Following construct development and descriptive analyses, correlations were run in order to observe relationships between the parenting measures and the child outcome measures. Hypothesis 7 noted that parental support and children's self-esteem are positively correlated. Correlation tables showing the relationship between the support measures and self-esteem in all three waves are presented in Table 24. The relationship between each parental support measure (for both mothers and fathers) and sons' and daughters' self-esteem can be seen within each wave and across time.

Differences were present on correlations between the various support measures and self-esteem for both boys and girls. For example, for younger children in Wave 1, parental intrinsic support was more highly correlated to self-esteem than were extrinsic support and time/closeness. In Wave 2, both intrinsic support and time/closeness had moderate positive correlations to children's self-esteem. Furthermore, the correlations between intrinsic support and self-esteem were generally stronger between mothers and their daughters and between fathers and their sons. The opposite effect was noted for extrinsic support; a stronger correlation was noted between fathers and daughters and between mothers and sons. In Wave 2, the correlations between perceptions of mothers' time/closeness and daughters' self-esteem scores tended to be more pronounced than those for mothers and their sons. Reciprocal influences also appear to be present. Children's self-esteem in Wave 1 was positively correlated to parental intrinsic support and time/closeness in Waves 2 and 3. Although it is expected that when running a series of correlations some statistically significant findings are due to random error, definite patterns are present in the results, particularly within waves.

In an effort to test Hypothesis 8 (stating that parental support is negatively related to child behavior

problems), correlations were run between the parental support measures and children's behavior problems (Table 25). Generally, the parental intrinsic support and time/closeness measures were negatively related to behavior problems, especially for boys. Interestingly, negative correlations between fathers' supportive behaviors and behavior problems in children were stronger for daughters in 1981. Parental extrinsic support, while negatively related to behavior problems in most instances, did not appear to be as influential a factor in predicting behavior problems in children. Again, referring to Table 25, one can see reciprocal relationships between earlier measures of children's behavior problems and subsequent parenting behavior. For example, external behavior problems for both boys and girls at Time 1 are negatively correlated with parental supportive behaviors in later time periods. Overall, these findings support Hypothesis 8.

Parental Control and Child Outcomes

In line with Hypothesis 9 (asserting a negative relationship between parental control and children's self-esteem), the parental control measures behaved much as expected in correlational analyses. Generally, a negative relationship was noted between parental control, especially the rejection measure, and children's self-esteem (Table

26). More specifically, parental coercion showed no relationship to self-esteem in 1976, although a modest negative correlation between paternal coercion and self-esteem showed up later in Time 2 for girls. In the second wave, maternal coercion showed a small negative correlation for both boys and girls; no statistically significant relationship was apparent between fathers' coercion and self-esteem in children. Parental rejection and permissiveness had stronger negative correlations with children's self-esteem, especially for girls. Withdrawal of privileges had virtually no correlation with children's self-esteem. Overall, none of these correlations were as strong as the correlations noted between parental support and children's self-esteem.

In considering parental control and child behavior problems (Table 27), fathers' coercion in 1976 was negatively correlated with behavior problems for both younger boys in the first wave and adolescent boys in the second wave. Mothers' and fathers' coercion was positively related to behavior problems for adolescent girls in the second wave. Maternal coercion, especially in 1981, was strongly correlated with both internal and external behavior problems in girls in 1981, and continued to be related to behavior problems in 1987. Maternal coercion in 1981 was also positively correlated to problem behaviors in boys in

1981 and 1987, although to a lesser extent than for girls. One could speculate that perhaps strong control from fathers early on holds problem boys in check, while maternal coercion contributes to problems later on, especially for girls.

Although parental rejection, especially maternal, was positively associated with behavior problems in both boys and girls, the relationship was stronger for girls. Permissiveness, on the other hand, was not a strong or consistent predictor of behavior problems in these analyses. Maternal permissiveness at Time 1 was positively correlated to internal behavior problems in boys at Time 2, and similarly, paternal permissiveness at Time 2 was positively correlated with external behavior problems at Time 3 for boys. However, these correlations were not part of a consistent pattern.

Maternal withdrawal of privileges tended to be negatively correlated with internal behavior problems for boys in Wave 1. However, this measure was positively correlated to external behavior problems in adolescent girls in Wave 2 and continued to have an effect on girls in Wave 3. Paternal withdrawal of privileges was negatively correlated to internal behavior problems in adolescent boys in Wave 2.

For the most part, Hypothesis 10, stating that parental coercion, rejection, and permissiveness are positively related to children's behavior problems, was supported by these analyses. Maternal coercion and rejection showed consistent moderate correlations with behavior problems in children, especially girls. And while fathers' coercion in 1976 was negatively related to boys' behavior problem, it was positively related to behavior problems in girls later on.

The Relationship of Self-Esteem to Behavior Problems

When correlational analyses were run between the self-esteem measures and those for internal and external behavior problems, a negative relationship was observed within and across time periods. Moreover, a delayed effect was present, as self-esteem at earlier ages was negatively correlated with behavior problems later on. Separate but parallel findings for boys and girls are shown in Table 28. These findings lend strong support to the last hypothesis, that positive self-esteem is negatively correlated to behavior problems in children.

Summary of the Findings

Descriptive mean comparisons showed some differences between mothers and fathers and daughters and sons. For

example, differences were noted between children's perceptions of their mothers' and fathers' parenting behavior. In this study, mothers were seen by both sons and daughters as more nurturing. On the other hand, mothers were also scored higher on most of the control measures.

A few differences were also observed between boys' and girls' perceptions of parental support and control. From the children's point of view, parents were equally supportive of both sons and daughters. Daughters in 1976 and 1981 viewed their mothers as being more coercive and rejecting, whereas teenage sons in 1981 rated their fathers higher on coercion. Boys in 1981 rated themselves higher on the self-esteem measure, but differences were not apparent between boys and girls in the other two waves. Younger boys in 1976 scored higher on the external behavior problems index, but virtually no differences were observed between boys and girls on behavior problems in the other rounds of data.

Correlational analyses showed that, for the most part, the measured constructs were related as expected. More specifically, children's perceptions of parental support were positively correlated with self-esteem and negatively correlated with their behavior problems. Conversely, children's perceptions of parental coercion, rejection, and permissiveness were negatively correlated with self-esteem

and positively related to children's behavior problems.

Overall, maternal support and control were more strongly related to self-esteem and behavior problems for both boys and girls, although there were several instances (e.g., intrinsic support in 1981) of a stronger father-son connection for some of the measures. In most instances, girls in this sample appeared to be more sensitive to parental behaviors than boys both in terms of self-esteem and behavior problems.

Introduction to Structural Equation Analyses

The analyses to this point were conducted in order to identify the variables and measures that were most theoretically and statistically appropriate to include in structural equation models. Although the constructs themselves were of interest, the underlying question was whether or not they would be related in the expected ways. And while some of the correlational findings and results of the t-test analyses may be due to random error, the overall patterns of the findings suggested that there were significant relationships between the independent and dependent constructs, particularly within specific time periods. The preliminary findings also suggested that some of the relationships were significant across time, although not to the extent that they were within time periods.

In order to more carefully examine these very complex relationships, and in an effort to test direction of effects across waves, structural equation analyses were done using LISREL models. The findings for these analyses appear in Chapter V.

CHAPTER V

RESULTS OF STRUCTURAL EQUATION ANALYSES[1]

Introduction

The purpose of doing structural equation analyses (LISREL) on these data was to move beyond traditional analyses in order to take into consideration the interactions and error variance between all of the observed and latent variables. As hypothesized and reported in the preceding chapter, preliminary analyses revealed differences between boys and girls; therefore, separate models were estimated for each gender. Because of the complexity of the data, it was also necessary to estimate separate models for fathers and mothers.

As noted in the previous chapter, data from Wave 1 were problematic. Data on fathers were not available for analyses, and when structural equation analyses were attempted on the mothers' data, the parenting measures did not hold together well at all. Following the initial LISREL run, each measure was comprised of only a single item indicator. At that point, it appeared that LISREL analyses were not appropriate for those data.

---

[1]Tables and figures describing the findings presented in this chapter are found in Appendix B.

Some notes of clarification regarding the models are first provided. For a detailed explanation of structural equation modeling, refer to Joreskog and Sorbom (1989) and Bollen (1989). The latent variables for each model included parental support and control (for the 1987 models, only parental support was available for analyses), children's self-esteem, and internal and external behavior problems. The exogenous, or independent, variables consisted of parental support and control dimensions, while the endogenous (dependent) variables included self-esteem along with internal and external behavior problems.

The indicator variables for each of the measures differed slightly between boys and girls and between mothers and fathers. This was expected, as it was anticipated that the models would vary somewhat between these groups. Although all of the variables identified in the preliminary analyses were included in the initial structural equations, only those variables that proved to be good indicators of each measure were included in the final models.

As structural equation analyses commenced, two of the parental support measures and one of the parental control measures were eliminated. Having reviewed Barber's (Barber & Thomas, 1986) work on parental support, and then conferring with him personally, it was determined that the three support measures are actually measuring one underlying

dimension. Therefore, as preliminary analyses indicated that **intrinsic support** was more strongly correlated to children's outcomes overall, that measure was used as the measure of parental support. In considering the control measures, the preliminary analyses of this study showed little relationship between the **withdrawal of privileges** measure and children's self-esteem or behavior problems. Therefore, that measure was not included in these analyses.

Interestingly, for the self-esteem measure in the 1987 data, only those items that were asked in a negative manner were retained by the LISREL program. An explanation for this finding comes from the work of Carmines and Zeller (1979) who did factor-analytic and construct validity analyses of Rosenberg's self-esteem scale. They found that the scale separated into two factors--the positive self-esteem factor (items were worded positively) and the negative self-esteem factor (items were worded negatively). However, further analyses revealed that rather than representing different constructs, both factors were nearly identically related to other outside measures, although with differing signs. The dual dimensionality was attributable to random error due to response set among the different types of items. In sum, the two factors were measuring a single dimension--self-esteem.

Included on each of the models is a notation of the solution used to calculate the path coefficients. Although the path coefficients were stronger in the standardized solutions, in order to make comparisons between the different models, the maximum likelihood solution was reported. Three goodness-of-fit indices are also reported for each model, including the goodness-of-fit index (GFI), the adjusted goodness-of-fit index (AGFI), and a chi square value with its degrees of freedom and p value.

Joreskog and Sorbom (1981) stated that the GFI is "a measure of the relative amount of variances and covariances jointly accounted for by the model" (pp. 140-141). The AGFI is adjusted for degrees of freedom. The GFI and the AGFI should both range from 0 to 1. Generally, a GFI of .90 or better is indication that the model is an good fit. Both the GFI and AGFI are thought to be relatively independent of sample size and are therefore recommended in interpreting the fit of the model to the data. For a more comprehensive description of these values, see Bollen, 1989 and Joreskog & Sorbom, 1989. Both values are reported for each model.

The chi square measure may also be used to test goodness-of-fit of the model if the sample size is large enough and if the model has been specified correctly. Briefly, large chi square values correspond to a bad fit, while small chi square values suggest a good fit. Some

explanation of what constitutes a large or small chi square is in order here. First, it should be noted that:

> The chi square value is sensitive to sample size and very sensitive to departures from multivariate normality of the observed variables. Large sample sizes and departures from normality tend to increase X^2 over and above what can be expected due to specification error in the model. (Jorskog & Sorbom, 1989, p. 43)

Also, the degrees of freedom determine the standard by which to judge whether chi square is large or small. If one adheres to a conservative interpretation, the value of chi square should be less than three times the degrees of freedom; others (e.g., Marsh & Hocevar, 1983) stated that any value of chi square that is less than five times the degrees of freedom is small enough to indicate a good fit.

The above goodness-of-fit indices do not specify that a model is correct, only that it is a good fit. Furthermore, although one can observe the impact of the exogenous variables upon the endogenous variables or the influence of latent variables upon one another, causation cannot be proved.

In the following analyses, the first measured variable for each latent variable was set or assigned to be a reference indicator and was given the value of 1.0. The loadings for the other variables were allowed to be freely estimated (refer to Jorskog & Sorbom, 1989). The values of each of the indicator variables (lamdas) showing their

contribution to the latent variable are shown in each model. In isolated cases (specifically the **love withdrawal** measure) in which one variable accounted for all of the variance in the latent variable, the model was relaxed slightly, and the value of that variable was set to .95 with the theta delta (error variance for that variable) value being set to .05. And although the direct paths (Betas) between self-esteem and both types of behavior problems were estimated, since theoretically, there was no basis to assume direction between internal and external behavior problems, the path between the two was not estimated. The covariance values (phi) between parental support and control measures were estimated as was the covariance between internal and external behavior problems (psi).

Finally, for each of the latent outcome variables, an R^2 is reported. This R^2 is not equivalent to the R^2 obtained in regression analyses. The R^2 reported for each latent outcome variable is a measure of several relationships jointly, and its value is influenced markedly by any random measurement error in the indicator variables (Bollen, 1989; Joreskog & Sorbom, 1989). Briefly, the R^2s obtained in LISREL are the percent of covariance that is "explained" within the model. However, the covariance that is there to be "explained" is determined by the model; respecifying the model influences the value of R^2.

Findings of the LISREL analyses are presented in chronological order. The findings and models derived from Wave 2 data are presented first, followed by findings and models based on data from Wave 3. The findings, along with the models, that show the effects of parenting style at time two on child outcomes at time 3 are then discussed. For each wave of data, an accompanying table (Tables 29 through 31) shows the original variables selected for analyses. Finally, the findings are discussed in terms of the hypotheses put forth earlier in this study.

Structural Equation Analyses for Wave 2 Data[2]

In line with the theoretical assumptions of this study, the inner or theoretical model is shown in Figure 1. It was assumed that parental support and control would have a direct effect on self-esteem, internal behavior problems, and external behavior problems in children. It was also hypothesized that parental support and control would have an indirect effect on behavior problems through self-esteem, and that relationship is shown in the model. The outer models for the study appear in Figures 2 through 13, and the findings for those models are now discussed.

---

[2]Although the overall fit of most of the models is acceptable, it will be noted that often the values of individual paths in the models are small. An explanation of the factors contributing to these findings is presented at the end of this chapter.

Perceptions of Maternal Support and Control and Children's Outcomes - 1981

In considering the influence of mothers' supportive and controlling behaviors on child outcome, the Wave 2 model for mothers and daughters shows a relatively good fit overall (refer to Table 29 and Figure 2). The strongest effect is that of maternal support on daughters' self-esteem, although support also has a direct inverse effect on both types of behavior problems. Maternal controlling behaviors had a very limited effect on both self-esteem and behavior problems. Similar effects were noted between mothers and sons, although the relationships were not as strong as those observed for daughters (Figure 3). As shown in both models, the effects of self-esteem on behavior problems were low for both boys and girls in this wave. The overall model for mothers and daughters (GFI, .90; AGFI, .89) showed a slightly better fit than that for mothers and sons (GFI, .90; AGFI, .86).

Perceptions of Paternal Support and Control and Children's Outcomes - 1981

The Wave 2 model for fathers and daughters (Figure 4) also showed a significant positive effect of paternal support on daughters' self-esteem with insignificant direct effects on behavior problems. Very limited effects were noted between the control measures and the outcome measures.

The overall fit of the model, however, was good (GFI, .92; AGFI, .88).

The Wave 2 model for fathers and sons (Figure 5) was similar to that for daughters, with the effect of paternal support on sons' self-esteem being slightly higher than that for daughters (Gamma = .46 for boys and .42 for girls). Again, the paternal control measures only accounted for a very limited amount of the overall effects in the model. The overall fit of the model for fathers and sons (GFI, .89; AGFI, .87) was not as good as that for fathers and daughters (GFI, .92; AGFI, .88).

By comparing the models constructed from this wave of data, a few differences can be noted between mothers and fathers. Specifically, the maternal support measure appears to be a stronger predictor for self-esteem and behavior problems in daughters. In contrast, compared to maternal support, paternal support is a stronger predictor of sons' self-esteem. Contrary to expectations, self-esteem for both boys and girls was not a strong predictor of behavior problems in any of the models within the 1981 wave of data.

Structural Equation Analyses for Wave 3 Data

Perceptions of Maternal Support and Youth Outcomes - 1987

The findings for this third survey round of youth who were in their late teens and early 20s were significantly

different than those when the subjects were in their early to mid teens. These findings are due partly to the fact that no questions were asked about parental control in this wave of data collection; therefore, control measures could not be included in the models (Table 30 lists items included in these analyses). Maternal support had very little effect on self-esteem or on behavior problems for daughters (Figure 6) or sons (Figure 7). However, these analyses showed a moderate effect of self-esteem on behavior problems for both young women and young men. These findings most likely reflect the growing independence of this age group of youth along with the lessening effects of parental influence. The overall goodness-of-fit was acceptable for both daughters and sons (GFI = .91, AGFI = .88 for both).

Perceptions of Paternal Support and Youth Outcomes - 1987

Similar findings were observed for the models showing paternal parenting style and youth outcomes (see Figures 8 and 9). The effects of paternal support on self-esteem and behavior problems were negligible for both daughters and sons. Again, however, self-esteem was the strongest predictor of behavior problems for young men and women. The overall fit for both models was relatively good, although the fit was slightly better for fathers and sons than

fathers and daughters (GFI = .91, AGFI =.88; GFI = .90, AGFI = .87, respectively).

Parenting Behaviors and Later Child Outcomes

For these analyses, parental support and control in 1981 were predicted to affect youth outcomes in 1987. For mothers, the effects of support and control in Wave 2 on youths' self-esteem and behavior problems in Wave 3 were not significant for either daughters or sons (Refer to Table 31 along with Figures 10 and 11). Self-esteem was the salient variable predicting behavior problems for both young men and young women. The goodness-of-fit for both models was adequate (GFI = .91, AGFI - .88 for girls; GFI = .91, AGFI = .87 for boys).

Comparable findings were observed in the models depicting paternal influences on daughters' and sons' outcomes (refer to Figures 12 and 13). Again, self-esteem showed a moderate negative relationship to behavior problems, with paternal support and control showing virtually no direct effects. The models showed a less than adequate fit compared to the maternal/youth models (GFI = .89, AGFI = .85 for girls; GFI = .85, AGFI = .81 for boys).

Discussion of Findings in Relation to Hypotheses

Overall, the models were consistent with theory in showing the relationships between parental support and control and children's self-esteem and behavior problems. In line with the assertions of the fourth hypothesis for this study, parental support was consistently a moderate predictor of adolescents' self-esteem. And while it was hypothesized that parental support would have a negative impact on behavior problems for both boys and girls (Hypothesis 5), the effect in these analyses was very small. For this sample, the parental control measures had virtually no effect on children's self-esteem or behavior problems. In those respects, the hypotheses (5 and 7) addressing parental control and child outcomes are not supported. Self-esteem, for the older youth in Wave 3, was the strongest predictor of behavior problems. This finding supports Hypothesis 8, which states that there is a negative relationship between self-esteem and behavior problems.

Another expectation of this study was that parenting style would continue to have an influence on children's self-esteem and behavior problems over time. Since data from Wave 1 could not be analyzed from a structural equation standpoint, it was impossible to determine whether early parenting behaviors influenced later child outcomes. Findings from Wave 2 and 3 data show that there is virtually

no relationship between parenting of teens and their self-esteem or manifestation of behavior problems in their early adult years. Rather, it is the youth's self-esteem that has a negative impact on behavior problems. In sum, self-esteem is an important intervening variable in adolescence, and the variable of interest in early adulthood.

Model Respecification

The models presented in this study cannot be considered finished products. As noted at the beginning of this discussion, a number of models showed an acceptable overall goodness-of-fit, yet the path coefficients and R^2s were relatively small. Bollen (1989) described a number of factors that may contribute to such findings. First, the variables selected may not be good indicators of the latent variable. In these analyses, although careful selection, factor analyses, and reliability analyses were carried out, the variables measuring control remained problematic. Furthermore, it is desirable to have at least three indicator variables for each measure; such was not the case with the majority of control measures.

Another factor contributing to low values within some models is that of error variance. The squared correlations of each indicator should be .20 or better in order to be included in the model. In this study, that criterion was

met. The error terms may also be respecified in order to more clearly reflect error variance. However, in this study, when the models were respecified by fixing the error terms for the independent variables, then freeing the diagonal matrices, no improvement was observed.

Other factors contributing to problems within the models include characteristics of the sample and also sampling techniques. The fact that many of the questions were asked of young children very likely contributed to the serious problems encountered in the 1976 data, and perhaps to the later data as well. The way that the questions are asked--with a positive or a negative orientation--also contributes to error variance within the models. Selecting just one type of question could possibly improve the values.

Other problems in the data, such as outliers, and variables that are not linear in nature, also may cause problems within a model. Although outliers did not seem to be present in the final data used for this study, it is possible that the effects of at least one of the control measures (**permissiveness**) was curvilinear in nature.

In sum, by considering the factors that may be contributing to error in the model, the researcher may use a variety of approaches to respecify the model, with the goal of making it fit better for each parameter as well as for the overall model. However, the theoretical assumptions

guiding the study should not be violated simply to obtain a better model. At this point in the study, no other approaches or analyses were attempted, and the models remain to be reworked.

CHAPTER VI

SUMMARY AND CONCLUSIONS

The relationship between parents and their children is considered to be perhaps the most important of all human relationships because of the lasting influence it has on children's lives. Social scientists have spent a great deal of time attempting to define, describe, and study the various facets of parenting behaviors and their ultimate effect on child outcomes. The purpose of this study was to add to this knowledge base by taking advantage of a large longitudinal survey focusing on characteristics of children and their families. The National Survey of Children (NSC) offered extensive data from which to study a large number of U.S. children and their families over time. Three rounds of data were collected: In 1976 when the children were 7-11 years old; in 1981 when the children were age 12-16; and in 1987 when the children were 17 to 22 years of age.

For this study, the target sample consisted of Caucasian children being reared in never-disrupted families (N = 532). Because of the complexity of parents' marital status, and since so few minority children were living in never-disrupted families, data on children in other types of households or of different races were not included in these analyses.

Parenting measures (i.e., children's perceptions of parental support and control) were developed from children's reports of their parents' behaviors in all three waves of data. Self-esteem measures, also based on children's reports, were selected from Rosenberg's self-esteem scales included in Wave 1 and Wave 3 data, and on satisfaction items included in Wave 2 data. Items from the Child Behavior Problems Index, based on parents' reports, were used to develop internal and external behavior problems indexes in each of the three waves of data.

Preliminary correlational analyses showed that children's perceptions of parental support, particularly intrinsic support and closeness to the parent, were moderate predictors of children's self-esteem. This relationship was especially notable within data waves, but parental support in children's earlier years continued to be positively related to self-esteem later on. Perceived parental support was negatively related to both internal and external behavior problems, but this relationship was not as strong as that between parental support and children's self-esteem. Overall, stronger relationships were noted between the perceived maternal support measures and children's outcomes, and mothers were perceived as being the more supportive parent. The basis for differences in mothers' and fathers'

data is most likely due to the fact that mothers, in most instances, spend more time caring for their children.

Parental control measures, specifically, coercion, rejection, and permissiveness, were negatively related to children's self-esteem and positively related to children's behavior problems. However, these relationships were not as consistent or strong as those for parental support. Parental rejection and permissiveness, especially, were negatively related to children's self-esteem. Parental rejection, particularly maternal rejection, showed the strongest relationship with behavior problems in children. These relationships were stronger for girls than for boys. Mothers were perceived by their children as being the more controlling of the two parents. Again, this finding may be a function of the amount of children's interaction and time spent with mothers compared to fathers.

In considering gender differences, boys and girls differed on few of the measures selected for these analyses. Teenage boys in the second wave rated themselves higher on self-esteem; no differences were noted in the other two waves. These findings may be due, in part, to sample characteristics--the majority of children in this sample scored high on self-esteem. When boys and girls were compared on the behavior problems indexes, younger boys in the first wave were rated higher by their parents on

external behavior problems. However, no other statistically significant differences were observed between boys and girls on the other behavior problems indexes. It was expected that boys would score higher on external behavior problems, and that girls' scores would be higher on internal behavior problems. Sample characteristics may have accounted for these findings also. The majority of the children, both boys and girls, were rated low on behavior problems by their parents. It may also be, as noted in Chapter II, that girls are becoming more similar to boys in expressing behavior problems externally.

In evaluating child characteristics over time, the preliminary findings of this study showed positive correlations between children's self-esteem in earlier waves and their self-esteem later on. Similarly, children who exhibited behavior problems in earlier waves were more likely to score higher on behavior problems later on.

Structural equation analyses (LISREL) showed similar types of relationships between perceived parental support and children's outcomes, although the strength of the relationships was not as strong as anticipated. While the preliminary analyses indicated that maternal support was more consistently correlated with children's outcomes, paternal support was also a moderate predictor of adolescent sons' and daughters' self-esteem in these structural

equation analyses, especially for sons. In all of the structural equation models, the effects of parental control measures were nil or insignificant. And although self-esteem was not a strong predictor of behavior problems in the second wave LISREL analyses, it was a moderate predictor of behavior problems for the Wave 3 sample. These findings may be a function of the different measures used in each wave of data collection, but may also reflect different interactive processes characteristic of each age group.

In sum, when evaluating the effects of parenting style on child outcomes, the findings of this study indicate that perceived parental support, specifically intrinsic aspects of support, is the most important parenting behavior influencing children's self-esteem and behavior problems. And while parental control measures were not strong predictors of child outcomes in this study, enough literature exists stating otherwise that these findings are most likely due to the properties of the variables used to develop the measures and perhaps to the characteristics of this sample.

Limitations of the Study

The limitations of this study are several and are primarily related to data, sampling, and analyses. First, although the NSC provided a large longitudinal sample of

children and a considerable number of variables addressing children and their families, still, the theoretical premises of this study went beyond the data available. In that respect, the study was constrained by the data available. This was particularly true in developing the parenting measures, as data were not available on fathers in the first wave, and somewhat different questions were asked in each wave of data collection.

Second, although the NSC was comprised of a nationally representative group of children in the first wave, this was not the case by Wave 3. Furthermore, for this study, the sample was limited further by selecting only Caucasian children in never-disrupted families. Therefore, while this sample may be representative of that particular group of children, inferences cannot be drawn to children and families in other circumstances. Another sampling problem encountered in this study was that of analyzing responses of children at different ages. Part of the difficulty with the 1976 data may have simply been due to the young age of the children when they answered the questions.

Third, while preliminary analyses showed some of the expected patterns of correlations between the independent and dependent measures of this study, the interrelationships between the measures have not yet been fully investigated. The structural equation models, although complete for this

study, in reality lend themselves to further exploration. The models need to be reworked and respecified, and other contributing factors need to be considered. For example, as noted in Chapter II, factors such as race, religion, culture, and SES influence parental attitudes towards parenting style as well as children's response to it. These relationships should be examined in future models. Models that include information on both mothers and fathers would also help to clarify the interactive effects of parenting style and child outcomes.

Theoretical Considerations

In considering the theoretical tenets of this study, it is important to determine the appropriateness of the theories referred to in Chapter II. This study was approached from an interactionist stance, and it was asserted that children's perceptions would be most predictive of their outcomes. It is possible that using parents' own perceptions of parenting style may have been equally or more useful in analyzing these data. One could conceivably test this theory by measuring the discrepancy between parents' and childrens' perceptions and comparing child outcomes from both perspectives.

The principles of social learning theory, also a foundation for this study, were only weakly supported by the

findings. While parental coercion was positively related to external behavior problems in children, the correlation was neither strong nor very consistent. However, as parents in this study were generally viewed by their children as being supportive, the fact that these children scored high on self-esteem and low on behavior problems is some indication that positive parental modeling is associated with positive child outcomes.

It may be that a different theoretical approach (e.g., bio-social theory) would have been more useful in explaining parent-child relationships from these data. From a socio-biological standpoint (see Scarr, 1992), children's temperaments contribute to both their self-esteem and the extent to which behavior problems are manifested. Children's and parents' biogenetic characteristics also appear to contribute to the ways in which parents react to and treat their children and, in turn, how children respond. The sociobiological approach could be tested by expanding upon the present investigation and including variables tapping the bio-social domains of both children and parents.

Conclusions

The findings of this study, as expected, conformed to the majority of prior studies that have addressed parent-child relationships. Additionally, by analyzing children

being reared in never-disrupted families, it was possible to investigate fathers' effects on children, along with those for mothers. Furthermore, with the availability of longitudinal data, this study provided a glimpse into parent-child relationships over time. For example, in addition to observing the effects of parenting on children's behaviors over time, the influence of children's self-esteem and behavior problems in earlier waves on parenting style in later waves can be seen.

There is no question that the ways in which parents treat their children are important predictors of self-esteem and the extent to which children will have problem behaviors. The most salient parental factor affecting child outcomes in this study was children's perception of parental support, particularly the intrinsic aspects of support. Feeling trusted, loved, and close to the parent were important predictors of children's self-esteem. Moreover, intrinsic support in children's younger years continued to have a positive effect later on in their lives. Mothers were generally seen as being more involved (both from a support and a control standpoint) with both sons and daughters. However, fathers' support was especially important to teenage boys and was also moderately correlated with self-esteem of teenage daughters. The effect of parenting behaviors on children's self-esteem is an

important finding, as children's self-esteem appeared to act as a moderate deterrent against behavior problems when they were in their late teens and early adulthood.

At first glance, it may appear that there were few significant findings. However, what was not found (i.e., high correlations between parenting behaviors and child outcomes and marked differences between boys and girls) is also noteworthy. As social scientists, we have perhaps become so concerned with troubled families and aberrant behavior that we tend to overlook children and families who appear to be doing well (see Schvaneveldt & Young, 1992). For the most part, in this study, parents were viewed positively by their children, and parents viewed their children positively as well. In addition, children's self-esteem was high across all three waves of data. Overall, these children and their families appeared to be doing well. It is fairly well documented that growing up in a well-functioning, two-parent family is the optimal situation for children (e.g., refer to Stinnett & DeFrain, 1989 and Stinnett, DeFrain, King, Knaub, & Rowe, 1981). And while approximately half of all children will experience disruption in their lives, an equivalent number of children will spend their growing-up years in two-parent families. From a therapeutic or intervention standpoint, findings related to these children and their families have important

implications for those families and children who are having problems.

Another important finding that really "was not there" was the limited impact that parenting behaviors had over all, especially in regard to behavior problems. For quite some time, parents have been held responsible for their children's behaviors as well as their feelings of well-being. However, social scientists recognize that other factors, in addition to parenting behaviors, affect child outcomes. Children may have low self-esteem and behavior problems despite the parents' best efforts to help their offspring (Miller, 1993).

It is clear that the final answers addressing the complex nature of the parent-child connection are not yet in. However, as researchers continue to examine various facets of parent-child relationships, and more knowledge is added to the broad base of information at hand, it is expected that our understanding of this very important relationship will be enhanced. In conclusion, the final phase of any investigation such as this is to share the knowledge gained with those for whom it will be most beneficial--mothers and fathers who are trying to effectively raise their children.

REFERENCES

Achenbach, T. M. (1978). The Child Behavior Profile: I. Boys aged 6-11. Journal of Consulting and Clinical Psychology, 46, 458-488.

Achenbach, T. M. (1979). The Child Behavior Profile: An empirically based system for assessing children's behavioral problems and competencies. International Journal of Mental Health, 7, 24-42.

Achenbach, T. M., & Edelbrock, C. S. (1978). The classification of child psychopathology: A review and analysis of empirical efforts. Psychological Bulletin, 85, 1275-1301.

Achenbach, T. M., & Edelbrock, C. S. (1979). The Child Behavior Profile: II. Boys aged 12-16 and girls aged 6-11 and 12-16. Journal of Consulting and Clinical Psychology, 47, 223-233.

Achenbach, T. M., & Edelbrock, C. S. (1981). Behavioral problems and competencies reported by parents of normal and disturbed children aged four through sixteen. Monographs of the Society for Research in Child Development, 46 (1), pp. 1-82.

Achenbach, T. M., Howell, C. T., Quay, H. C., & Conners, C. K. (1991). National survey of problems and competencies among four- to sixteen-year-olds: Parents' reports for normative and clinical samples. Monographs of the Society for Research in Child Development, 56 (3), Serial No. 225.

Alexander, J. (1973). Defensive and supportive communications in normal and deviant families. Journal of Consulting and Clinical Psychology, 40, 223-231.

Amato, P. R. (1987). Family process in one-parent, stepparent, and intact families: The child's point of view. Journal of Marriage and the Family, 49, 327-337.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. Psychological Bulletin, 103 (3), 411-423.

Anderson, K. E., Lyttonn, H., & Romney, D. M. (1986). Mothers' interaction with normal and conduct disordered boys: Who affects whom? Developmental Psychology, 22, 604-609.

Armentrout, V. A., & Burger, G. K. (1972). Children's reports of parental child-rearing behaviors at five grade levels. Developmental Psychology, 7, 44-48.

Aro, H. (1988). Parental discord, divorce and adolescent development. European Archives of Psychiatry and Neurological Sciences, 234 (2), 106-111.

Baden, C. (Ed.). (1980). Children and divorce: An overview of recent research. North Carolina University, Chapel Hill, Department of Maternal and Child Health. Wheelock College Center for Parenting Studies, 200 The Riverway, Boston, MA.

Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall.

Barber, B. K. (1987). Marital quality, parental behaviors, and adolescent self-esteem. Family Perspective, 21 (4), 301-319.

Barber, B. K. (1992). Family, personality, and adolescent problem behaviors. Journal of Marriage and the Family, 54, 69-79.

Barber, B. K., Chadwick, B. A., & Oerter, R. (1992). Parental behaviors and adolescent self-esteem in the United States and Germany. Journal of Marriage and the Family, 54, 128-141.

Barber, B. K., Olsen, J. E., & Shagle, S. C. (In press). Associations between parental psychological and behavioral control and youth internalized and externalized behaviors. Child Development.

Barber, B. K., & Thomas, D. L. (1986). Dimensions of fathers' and mothers' supportive behavior: The case for physical affection. Journal of Marriage and the Family, 48, 783-794.

Barnes, G. M., Farrell, N. P., & Windle, M. (1991). Parent-adolescent interactions in the development of alcohol abuse and other deviant behaviors. Family Perspective, 21 (4), 321-335.

Bartle, S. E., Anderson, S. A., & Sabatelli, R. M. (1989). A model of parenting style, adolescent individuation and adolescent self-esteem: Preliminary findings. Journal of Adolescent Research, 4 (3), 283-298.

Barton, K., Dielman, T. E., & Cottell, R. B. (1974). Child rearing practices and achievement in school. Journal of Genetic Psychology, 124, 155-165.

Baumrind, D. (1966). Effects of authoritative control on child behavior. Child Development, 37, 887-907.

Baumrind, D. (1969). Authoritarian vs. authoritative parental control. Adolescence, 3, 255-272.

Baumrind, D. (1971). Current patterns of parental authority. Developmental Psychology Monographs, 4, 1-103.

Baumrind, D. (1972). Socialization and instrumental competence. In W. Hartup (Ed.), Research on Young Children (pp. 202-224). Washington, DC: National Association for the Education of Young Children.

Baumrind, D. (1978). Parental disciplinary patterns and social competence in children. Youth and Society, 9, 329-346.

Baumrind, D. (1980). New directions in socialization research. American Psychologist, 35 (2), 639-652.

Baumrind, D. (1989). Rearing competent children. In W. Damon (Ed.), Child development today and tomorrow (pp. 349-378). San Francisco: Jossey-Bass.

Baumrind, D. (1991). Parenting styles and adolescent behavior. In R. Lerner, A. C. Peterson, & J. Brooks-Gunn, The encyclopedia of adolescence (pp. 756-758). New York: Garland.

Bayder, N. (1988). Effects of parental separation and reentry into union on the emotional well-being of children. Journal of Marriage and the Family, 50, 967-981.

Becker, W. C. (1964). Consequences of different kinds of parental discipline. In M. L. Hoffman & L. W. Hoffman (Eds.), Review of child development research (Vol 1) (pp. 169-208). New York: Russell Sage.

Bell, D., & Bell, L. (1982). Family climate in the role of the female adolescent: Determinants of adolescent functioning. Family Relations, 31, 519-527.

Bell, D., & Bell, L. (1983). Parental validation and support in the development of adolescent daughters. In H. D. Grotevant & C. Cooper (Eds.). Adolescent development in the family: New directions in child development (pp. 27-42). San Francisco: Jossey-Bass.

Belsky, J. (1980). Child maltreatment: An ecological integration. American Psychologist, 35, 320-335.

Bentler, P. M. (1980). Multivariate analysis with latent variables: Causal modeling. Annual Review of Psychology, 31, 419-455.

Block, J. H., Block, J., & Morrison, A. (1981). Parental agreement-disagreement on child-rearing orientations and gender-related personality correlates in children. Child Development, 52, 965-974.

Bollen, K. A. (1989). Structural equations with latent variables. New York: John Wiley & Sons.

Bollen, K., & Lennox, R. (1991). Conventional wisdom on measurement: A structural equation perspective. Psychological Bulletin, 110 (2), 305-314.

Booth, A. (1985). Quality of children's family interaction in relation to residential type and household crowding. In J. F. Wohlwill & W. Van Vliet (Eds.), Habitats for children: The impact of density (pp. 145-164). Hillsdale, NJ: Erlbaum Associates.

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development. Research perspectives. Developmental Psychology, 22 (6), 723-742.

Brynner, J. M., O'Malley, P., & Bachman, J. G. (1981). Self-esteem and delinquency revisited. Journal of Youth and Adolescence, 10, 407-441.

Burgess, R. L., & Conger, R. D. (1978). Family interaction in abusive neglectful and normal families. Child Development, 49, 1163-1173.

Burr, W. R., Leigh, G. K., Day, R. D., & Constantine, J. (1979). Symbolic interaction and the family. In W. R. Burr, R. Hill, F. I. Nye, & I. L. Reiss (Eds.), Contemporary theories about the family (Vol. 2) (pp. 42-111). New York: The Free Press.

Cantor, N. L., & Gelfand, D. M. (1977). Effects of responsiveness and sex of children on adults' behavior. Child Development, 48, 232-238.

Carmines, E. G., & Zeller, R. A. (1979). Reliability and validity assessment. Beverly Hills, CA: Sage.

Cherlin, A. J., Furstenberg, F. F., Chase-Lansdale, P. L., & Kiernan, K. E. (1991). Longitudinal studies of effects of divorce on children in Great Britain and the United States. Science, 252, 1386-1389.

Cicchetti, D., & Toth S. L. (Eds.) (1991). Internalizing and externalizing expressions of dysfunction. Hillsdale, NJ: L. Erlbaum Associates.

Clark-Lempers, D. S., Lempers, J. D., & Ho, C. (1991). Early, middle, and late adolescents' perceptions of their relationships with significant others. Journal of Adolescent Research, 6 (3), 296-315.

Clarke-Stewart, K. A., & Apfel, N. (1978). Evaluating parental effects on child development. In L. S. Shulman (Ed.), Review of research in education (Vol. 6). Itasca, IL: Peacock.

Clingempeel, W., Brand, E., & Tevoi, R. (1984). Stepparent-stepchild relationships in stepmother and stepfather families: A multimethod study. Family Relations, 33, 465-473.

Clingempeel, W., & Segal, S. (1986). Psychological adjustment of children in stepfamilies: Family structure and process influences. Child Development, 47, 474-484.

Cooley, C. H. (1956). Human nature and social order. Glenco, IL: Free Press. (Original work published 1902).

Coopersmith, S. (1967). The antecedents of self-esteem. San Francisco: Freeman.

Damon, W. (1988). The moral child: Nurturing children's natural growth. New York: The Free Press.

Dawson, D. A. (1991). Family Structure and children's health and well-being: Data from the 1988 National Health Interview Survey on Child Health. Journal of Marriage and the Family, 53, 573-584.

Demo, D. H. (1992). Parent-child relations: Assessing recent changes. Journal of Marriage and the Family, 54, 104-117.

Demo, D. H., & Acock, A. C. (1988). The impact of divorce on children. Journal of Marriage and the Family, 50, 609-648.

Demo, D. H., Small, S. A., & Savin-Williams, R. C. (1987). Family relations and self-esteem of adolescents and parents. Journal of Marriage and the Family, 49, 705-716.

Dornbusch, S. M., & Ritter, P. L. (1991). When effort in school does not produce better grades: A family environment affects a school process. Family Perspective, 21 (4), 285-298.

Dornbusch, S. M., Ritter, P. L., Leiderman, P. H., Roberts, D. F., & Fraleigh, M. J. (1987). The relationship of parenting style to adolescent school performance. Child Development, 58 (5), 1244-1257.

Duke, D. L. (1978). Why don't girls misbehave more than boys in school? Journal of Youth and Adolescence, 7, 141-158.

Duncan, O. D. (1975). Introduction to structural equation models. New York: Academic Press.

Dwyer, J. H. (1983). Statistical models for the social and behavioral sciences. New York: Oxford University Press.

Elder, G. H., Jr. (1960). Parental power legitimation and its effects on the adolescent. Sociometry, 26, 50-65.

Ellis, G. J., Thomas, D. L., & Rollins, B. C. (1976). Measuring parental support: The interrelationship of three measures. Journal of Marriage and the Family, 38 (4), 718-722.

Featherstone, D. R., Cundick, B. P., & Jensen, L. C. (1992). Differences in school behavior and achievement between children from intact, reconstituted, and single-parent families. Adolescence, 27 (105), 1-11.

Felson, R. B., & Zielinski, M. A. (1989). Children's self-esteem and parental support. Journal of Marriage and the Family, 51, 762-735.

Flavell, J. H., & Ross, L. D. (Eds.). (1981). Self-referent thought: The development of self-efficacy. Social Cognitive Development: Frontiers and Possible Futures. Cambridge, England: Cambridge University Press.

Foxcroft, D. R., & Lowe, G. (1991). Adolescent drinking behavior and family socialization factors: A meta analysis. Journal of Adolescence, 14, 255-273.

Furstenberg, F. (1987). The new extended family: The experience of parents and children after remarriage. In K. Pasley & M. Ihniger-Tallman (Eds.), Remarriage and stepparenting: Current research & theory (pp. 42-61). New York: Guilford Press.

Ganong, L., & Coleman, M. (1984). The effects of remarriage on children: A review of the empirical literature. Family Relations, 33, 389-406.

Garbarino, J. (1986). Troubled youth, troubled families: The dynamics of adolescent maltreatment. In D. Cicchetti & V. Carlson (Eds.), Research and theoretical advances on the topic of child maltreatment (pp. 685-706). Hawthorne, NY: Aldine DeGruyter.

Garmezy, N. (1976). Vulnerable and invulnerable children: Theory, research, and intervention. Abstracted in the Journal Supplement Abstract Service, Catalog of Selected Documents in Psychology, 6 (4), 96.

Gecas, V., & Schwalbe, M. I. (1986). Parental behavior and adolescent self-esteem. Journal of Marriage and the Family, 48, 37-46.

Godwin, D. D. (1988). Causal modeling in family research. Journal of Marriage and the Family, 50, 917-927.

Graham, P. J., & Rutter, M. L. (1968). The reliability and validity of the psychiatric assessment of the child, II. Interview with the parent. British Journal of Psychiatry, 114, 581-592.

Grusec, J. E., & Kuczynski, L. (1980). Direction of effect in socialization: A comparison of the parent's versus the child's behavior as determinants of disciplinary techniques. Developmental Psychology, 16 (1), 1-9.

Hartup, W. W. (1978). Perspectives on child and family interaction: Past, present, and future, In R. M. Lerner & G. B. Spanier (Eds.), Child influences on marital and family interaction: A life-span perspective (pp. 23-46). New York: Academic Press.

Hetherington, E. M. (1980). Divorce: A child's perspective. Annual Progress in Child Psychiatry and Child Development, 277-291.

Hetherington, E. M., & Clingempeel, W. G. (1992). Coping with marital transitions: A family systems perspective. Monographs of the Society for Research in Child Development, Serial No. 225, Vol. 57, Nos. 2-3.

Hetherington, E., Cox, M., & Cox, R. (1986). Long-term effects of divorce and remarriage on the adjustment of children. Annual Progress in Child Psychiatry and Child Development, 407-429.

Hoffman, M. L. (1967). Moral internalization, parental power, and the nature of parent-child interaction. Developmental Psychology, 5, 45-57.

Hoffman, M. L. (1984). Parent discipline, moral internalization, and development of prosocial motivation. In E. Staub, D. Bar-Tal, J. Karylowski, & J. Rekowski (Eds.), Development and maintenance of prosocial behavior (pp. 117-137). New York: Plenum.

Hollier, E. A. (1989). Beyond the tender years: A longitudinal study of parents' relationships with adolescents in nondivorced, divorced, and remarried families. Unpublished doctoral dissertation. University of Virginia, Charlottesville.

Huston, A. (1983). Sex-typing. In Hetherington, E. M. (Ed.), Handbook of child psychology (Vol. 4: Socialization, personality, and social development.) New York: John Wiley & Sons.

Johnson, M. (1963). Sex role learning in the nuclear family. Child Development, 34, 319-333.

Johnson, M. (1977). Fathers, mothers, and sextyping. In E. M. Hetherington & R. Parek (Eds.), Contemporary readings in child psychology (pp. 263-276). New York: McGraw-Hill.

Joreskog, K. G., & Sorbom, D. (1989). LISREL 7: User's reference guide. Mooresville, IN: Scientific Software, Inc.

Kandel, D. B. (1990). Parenting styles, drug use, and children's adjustment in families of young adults. Journal of Marriage and the Family, 52, 183-196.

Kellam, S. K., Branch, J. D., Agrawal, K. C., & Ensminger, M. E. (1975). Mental health and going to school: The Woodlawn program of assessment, early intervention, and evaluation. Chicago: University of Chicago Press.

Kinard, E. M., & Reinherz, H. (1984). Marital disruption: Effects on behavioral and emotional functioning in children. Journal of Family Issues, 5, 91-115.

Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. Child Development, 62, 1049-1065.

LaRossa, R., & Reitzes, D. C. (1993). Symbolic interaction and family studies. In, P. Boss, W. Doherty, R. LaRossa, W. Schumm, & S. Steinmetz (Eds.), Sourcebook of family theories and methods (Ch. 6). New York: Plenum.

Larzelere, R. E., & Klein, D. M. (1987). Methodology. In M. B. Sussman & S. K. Steinmetz (Eds.), Handbook of marriage and the family (pp. 125-155). New York: Plenum.

Lavee, Y. (1988). Linear structural relationships (LISREL) in family research. Journal of Marriage and the Family, 50, 937-948.

Lerner, R. M., & Spanier, G. B. (Eds.). (1978). Child influences on marital and family interaction: A life span perspective. New York: Academic Press.

Loeb, R. C., Horst, L., & Horton, P. J. (1980). Family interaction patterns associated with self-esteem in preadolescent boys and girls. Merrill-Palmer Quarterly, 26, 205-217.

Luster, T., Rhoades, K., & Hass, B. (1989). The relations between parental values and parenting behavior: A test of the Kohn Hypothesis. Journal of Marriage and the Family, 51, 139-147.

Maccoby, E. E., & Jacklin, C. N. (1974). The psychology of sex differences. Stanford: Stanford University Press.

Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In P. H. Mussen (Ed.), Handbook of child psychology: Vol. 4: Socialization, personality, and social development (pp. 1-101). New York: John Wiley & Sons.

Marsh, H. W., & Hocevar, D. (1983). Confirmatory factor analysis of multitrait-multimethod matrices. Journal of Educational Measurement, 20, 321-248.

McCarthy, J. D., & Hoge, D. R. (1984). The dynamics of self-esteem and delinquency. American Journal of Sociology, 90, 396-410.

McCord, J. (1990). Problem behaviors. In S. S. Feldman & G. R. Elliott (Eds.), At the threshold: The developing adolescent. Cambridge: Harvard University Press.

Menaghan, E. G., & Godwin, D. D. (1993). Longitudinal research methods and family theories. In P. Boss, W. Doherty, R. LaRossa, W. Schumm, & S. Steinmetz (Eds.), Sourcebook of family theories and methods (Ch. 11). New York: Plenum.

Miller, B. C. (1993). Families, science, and values: Alternative views of parenting effects and adolescent pregnancy. Journal of Marriage and the Family, 55, 1-15.

Miller, B. C., McCoy, J. K., Olson, T. D., & Wallace, C. M. (1986). Parental discipline and control attempts in relation to adolescent sexual attitudes and behavior. Journal of Marriage and the Family, 48, 503-512.

Murphy, L. B., & Moriarty, A. E. (1976). Vulnerability, coping and growth: From infancy to adolescence. New Haven: Yale University Press.

Paikoff, R. L., & Brooks-Gunn, J. (1991). Do parent-child relationships change during puberty? Psychological Bulletin, 110 (1), 47-66.

Patterson, G. R. (1976). The aggressive child: Victim and architect of a coercive system. In E. J. Nash, L. A. Hamerlynk, & L. C. Handy (Eds.), Behavior modification and families, Vol. 1: Theory and research (pp. 267-316). New York: Brunner/Mazel.

Patterson, G. R. (1982). Coercive family process. Eugene, OR: Castalia Press.

Patterson, G. R. (1986). Performance models for antisocial boys. American Psychologist, 41 (4), 432-444.

Peterson, G. W., & Rollins, B. C. (1987). Parent-child socialization. In M. B. Sussman & S. K. Steinmetz (Eds.), Handbook of marriage and the family (pp. 471-508). New York: Plenum.

Peterson, J. L., & Zill, N. (1986). Marital disruption, parent-child relationships, and behavioral problems in children. Journal of Marriage and the Family, 48, 295-307.

Rhoner, R. P. (1986). The warmth dimension: Foundations of parental acceptance-rejection theory. Beverly Hills, CA: Sage.

Rogosa, D. A. (1980). A critique of cross-lagged correlation. Psychological Bulletin, 88, 245-258.

Rollins, B. C., & Thomas, D. L. (1975). A theory of parental power and child compliance. In R. Cromwell & D. Olson (Eds.), Power in families (pp. 38-60). Beverly Hills, CA: Sage Publications.

Rollins, B. C., & Thomas D. L. (1979). Parental support, power and control techniques in the socialization of children. In W. R. Burr, R. Hill, F. I. Nye, & I. L. Reiss (Eds.), Contemporary theories about the family, Vol. 1 (pp. 317-364). New York: The Free Press.

Rutter, M., Tizard, J., & Whitmore, K. (1970). Education, health and behavior. London: Longman.

Scarr, S. (1992). Developmental theories for the 1990s: Development and individual differences. Child Development, 63, 1-19.

Schaefer, E. S. (1959). A circumplex model for maternal behavior. Journal of Abnormal and Social Psychology, 59, 226-235.

Shaffer, D. R., & Brody, G. H. (1981). Parental and peer influences on moral development. In R. W. Henderson (Ed.), Parent-child interaction: Theory, research, and prospects (pp. 83-123). New York: Academic Press.

Shagle, S. C., & Barber, B. K. (1993). Effects of family, marital, and parent-child conflict on adolescent self-derogation and suicidal ideation. Program for Adolescent Research, Center for Studies of the Family, Brigham Young University, Provo, UT.

Schvaneveldt, J. D., & Young, M. H. (1992). Strengthening families: New horizons in family life education. Family Relations, 41, 385-389.

Simons, R. L., Whitbeck, L. B., Conger, R. D., & Melby, J. N. (1990). Husband and wife differences in determinants of parenting: A social learning and exchange model of parental behavior. Journal of Marriage and the Family, 52, 375-392.

Sorenson, A. M., & Brownfield, D. (1991). The measurement of parental influence: Assessing the relative effects of father and mother. Sociological methods and research, 19 (4), 511-535.

Spivack, G., & Cianci, N. (1987) High-risk early behavior pattern and later delinquency. In J. D. Burchard & S. N. Burchard (Eds.), Prevention of delinquent behavior (pp. 44-74). Newbury Park, CA: Sage.

Steinberg, L., Mounts, N. S., Lamborn, S. D., & Dornbusch, S. M. (1991). Authoritative parenting and adolescent adjustment across varied ecological niches. Journal of Research on Adolescence, 1 (1), 19-36.

Steinberg, L., & Silverberg, S. (1986). The vicissitudes of autonomy in early adolescence. Child Development, 57, 841-851.

Steinmetz, S. (1979). Disciplinary techniques and their relationship to aggressiveness, dependency, and conscience. In W. R. Burr, R. Hill, I. F. Nye, & I. L. Reiss (Eds.), Contemporary theories about the family, Vol. 1 (pp. 405-438). New York: The Free Press.

Stinnett, N., & DeFrain, J. (1989). The healthy family: Is it possible? In M. Fine (Ed.), The second handbook on parent education (2nd ed., pp. 53-74). New York: Academic Press.

Stinnett, N., DeFrain, J., King, K., Knaub, P., & Rowe, G. (Eds.). (1981). Family strengths 3: Roots of well-being. Lincoln: University of Nebraska Press.

Thomas, W. I., & Znaniecki, F. (1918). The Polish peasant in Europe and America. Boston: Badger.

Thornburg, H. (1986). Adolescent delinquency and families. In G. K. Leigh & G. W. Peterson (Eds.), Adolescents in families (pp. 358-380). Cincinnati: South-Western Publishing.

Toner, T. (1986). Punitive and non-punitive discipline and subsequent rule following in young children. Child Care Quarterly, 15 (1), 27-37.

Wallerstein, J. S. (1985). Children of divorce: Preliminary report of a ten-year follow-up of older children and adolescents. Journal of the American Academy of Child Psychiatry, 24, 545-553.

Wallerstein, J. S. (1990). The long-term effects of divorce on children and their families. Paper presented at the National Council on Family Relations, Nov. 11, 1990, Seattle, WA.

Wallerstein, J., Corbin, S., & Lewis, J. (1988). Children of divorce: A ten-year study. In E. M. Hetherington & J. Arasteh (Eds.), Impact of divorce, single parenting, and stepparenting on children (pp. 198-214). Hillsdale, NJ: Laurence Erlbaum Associates.

Wallerstein, J., & Kelly, J. (1976). The effects of parental divorce. Experiences of the chid in later latency. American Journal of Orthopsychiatry, 46, 256-269.

Walters, J., & Walters, L. (1980). Parent-child relationships. A review, 1970-1979. Journal of Marriage and the Family, 42, 807-822.

Watson, D. G. (1989). Parenting styles and child behavior: A study of retrospective reports from parents of 2500 high school students. Unpublished doctoral dissertation. State University of New York, Buffalo, NY.

Wells, L. E., & Rankin, J. H. (1983). Self-concept as a mediating factor in delinquency. Social Psychology Quarterly, 46, 11-22.

Werner, E. E., & Smith, R. S. (1982). Vulnerable but invincible: A study of resilient children. New York: McGraw-Hill.

Whitehead, L. (1979). Sex differences in children's responses to family stress: A re-evaluation. Journal of Child Psychology and Psychiatry and Allied Disciplines, 20, 247-254.

Windle, M. (1991). Problem behavior in adolescence. In R. M. Lerner, A. C. Petersen, & J. Brooks-Gunn (Eds.), Encyclopedia of adolescence (pp. 839-843). New York: Garland.

Youniss, J., & Smollar, J. (1985). Adolescent relations with mothers, fathers, and friends. Chicago: University of Chicago Press.

Zill, N. (1988). Behavior, achievement, and health problems among children in stepfamilies: Findings from a national survey of child health. In E. M. Hetherington & J. D. Arasteh (Eds.), Impact of divorce, single-parenting and stepparenting on children (pp. 235-368). Hillsdale, NJ: Laurence Erlbaum Associates.

Zill, N. (1990). Behavior Problems Index based on parent report. Washington, DC: Child Trends, Inc.

APPENDICES

APPENDIX A. TABLES FOR PRELIMINARY ANALYSES

Table 1

Table of Means for Entire Sample of Boys and Girls on General Parenting Measures[a]

	MIN	MAX	$\bar{X}$	sd	N
1976					
M SUPPORT	7.0	14.0	11.69	1.41	532
F SUPPORT	2.0	4.0	3.56	.55	520
M CONTROL	16.0	31.0	24.39	2.21	531
F CONTROL	3.0	8.0	5.15	1.07	523
SELF-ESTEEM	13.0	22.0	19.20	1.86	531
B PROBLEMS	12.0	70.0	21.20	6.59	532
1981					
M SUPPORT	21.0	44.0	37.24	4.33	529
F SUPPORT	15.0	44.0	35.94	5.25	522
M CONTROL	14.0	31.0	20.48	2.80	529
F CONTROL	13.0	28.0	19.02	2.63	522
SELF-ESTEEM	14.0	29.0	24.85	2.45	529
B PROBLEMS	25.0	69.0	32.93	6.80	532
1987					
M SUPPORT	5.0	17.0	14.09	2.40	532
F SUPPORT	4.0	17.0	13.32	2.83	527
SELF-ESTEEM	10.0	18.0	16.40	1.53	532
B PROBLEMS	17.0	49.0	20.20	4.18	511

[a]Scores between constructs cannot be compared as different items were used to compute the scores for individual measures.

Table 2

Child Report of Parental Support - 1976

MATERNAL SUPPORT[a]

Maternal Intrinsic Support (Alpha = .31)

Variable	Item Description	Item-total Correlation	Factor Loading
ZV5725	Tells you you're good	.23	.73
ZV5726	Kisses or hugs you	.20	.62
ZV5742	Proud of you	.09	.56

Maternal Extrinsic Support (Alpha = .50)

Variable	Item Description	Item-total Correlation	Factor Loading
ZV5729	Buys something special	.36	.74
ZV5728	Gives money	.28	.71
ZV5727	Something special to eat	.32	.63

Maternal Time/Closeness

Variable	Item Description	Inter-item Correlation	Factor Loading
ZV5741	Spends enough time w/you	1.00	.87

[a]Overall maternal support, Alpha = .39

PATERNAL SUPPORT[b]

Paternal Intrinsic Support

Variable	Item Description
ZV5769	Proud of you

Paternal Time/Closeness

Variable	Item Description
ZV5768	Spends enough time w/you

[b]Overall paternal support, Alpha = .20

Table 3

Child Report of Parental Support - 1981

MATERNAL SUPPORT[a]

Maternal Intrinsic Support (Alpha = .73)

Variable	Item Description	Inter-item Correlation	Factor Loading
ZV1569	Encourages to do best	.45	.73
ZV1570	Appreciates accomplishments	.60	.72
ZV1571	Loves/interested in you	.52	.65
ZV1550	If you're wrong/talk	.37	.55
ZV1566	Trusts you	.39	.54
ZV1546	If you are good/pleased	.47	.52

Maternal Extrinsic Support (Alpha = .64)

Variable	Item Description	Inter-item Correlation	Factor Loading
ZV1548	Takes you to dinner/movie	.51	.79
ZV1549	Buys you something special	.44	.74
ZV1547	Kisses or hugs you	.39	.56

Maternal Time/Closeness (Alpha = .67)

Variable	Item Description	Inter-item Correlation	Factor Loading
ZV1561	Shows enough affection	.41	.74
ZV1560	Spends enough time w/you	.32	.73
ZV1563	Closeness to mother	.50	.48
ZV1564	Want to be like mother	.43	.47
ZV1562	Enjoy doing things w/mother	.45	.45

[a]Overall maternal support, Alpha = .81

(table continues)

PATERNAL SUPPORT[b]

Paternal Intrinsic Support (Alpha = .82)

Variable	Item Description	Inter-item Correlation	Factor Loading
ZV1628	Loves/interested in you	.69	.77
ZV1626	Encourages to do best	.63	.75
ZV1627	Appreciates accomplishments	.68	.75
ZV1623	Trusts you	.56	.67
ZV1607	If you're wrong/talk	.41	.53
ZV1574	If you are good/pleased	.52	.50

Paternal Extrinsic Support (Alpha = .67)

Variable	Item Description	Inter-item Correlation	Factor Loading
ZV1576	Takes you to dinner/movie	.56	.83
ZV1577	Buys you something special	.50	.78
ZV1575	Kisses or hugs you	.38	.59

Paternal Time/Closeness (Alpha = .75)

Variable	Item Description	Inter-item Correlation	Factor Loading
ZV1617	Spends enough time w/you	.31	.80
ZV1618	Shows enough affection	.51	.65
ZV1619	Enjoy doing things w/father	.62	.59
ZV1620	Closeness to father	.64	.52
ZV1621	Want to be like father	.52	.42

[b]Overall paternal support, Alpha = .85

Table 4

Youth Report of Parental Support - 1987

MATERNAL SUPPORT

Maternal Intrinsic Support (Alpha = .77)

Variable	Item Description	Item-total Correlation	Factor Loading
ZY871318	Closeness to mother	.66	.84
ZY871320	Share ideas w/mother	.63	.82
ZY871319	Want to be like mother	.57	.77
ZY871321	Right amount of love	.42	.62

PATERNAL SUPPORT

Paternal Intrinsic Support (Alpha = .87)

Variable	Item Description	Item-total Correlation	Factor Loading
ZY871328	Closeness to father	.78	.89
ZY871329	Want to be like father	.73	.85
ZY871330	Share ideas w/father	.73	.85
ZY871331	Right amount of love	.67	.81

Table 5

Child Report of Parental Control - 1976

MATERNAL CONTROL[a]

Maternal Coercion (Alpha = .26)

Variable	Item Description	Item-total Correlation	Factor Loading
ZV5724	Makes you follow rules	.15	.69
ZV5733	Spanks you	.15	.66

Maternal Rejection (Alpha = .24)
(2 factors included)

Variable	Item Description	Item-total Correlation	Factor Loading
ZV5735	Makes fun of you	.17	.77
ZV5736	Says she doesn't love you	.11	.77
ZV5734	Yells at you	.10	.71
ZV5739	Argue with her	.11	.61

Maternal Withdrawal of Privileges (Alpha = .44)

Variable	Item Description	Item-total Correlation	Factor Loading
ZV5737	Not let you watch TV	.29	.72
ZV5732	Not let you play w/friends	.29	.71
ZV5731	Sends you to your room	.22	.56

Maternal Permissiveness (Alpha = .44)

Variable	Item Description	Item-total Correlation	Factor Loading
ZV5720	Lets you snack & eat	.34	.71
ZV5723	Lets you curse/swear	.11	.59
ZV5718	Lets you watch any TV	.27	.49
ZV5722	Lets you stay up late	.19	.43
ZV5717	Lets you watch TV whenever	.25	.43

[a]Alpha for the overall list of maternal control variables is.42.

PATERNAL CONTROL

Paternal Coercion

Variable	Item Description
ZV5751	Makes you follow rules

Paternal Rejection

Variable	Item Description
ZV5766	Argue with him

Table 6

Child Report of Parental Control - 1981

Maternal Coercion (Alpha = .67)

Variable	Item Description	Item-total Correlation	Factor Loading
ZV1557	Spanks/slaps	.54	.78
ZV1553	Threatens	.55	.75
ZV1551	Sends to room	.38	.70

Maternal Rejection (Alpha = .52)
(2 factors)

Variable	Item Description	Item-total Correlation	Factor Loading
ZV1552	Makes fun of you	.28	.75
ZV1555	Says she doesn't love you	.38	.68
ZV1554	Yells at you	.29	.69
ZV1559	Argue with her	.30	.63

Maternal Withdrawal of Privileges

Variable	Item Description	Item-total Correlation	Factor Loading
ZV1556	Removes privileges		.56

Maternal Permissiveness (Alpha = .47)

Variable	Item Description	Item-total Correlation	Factor Loading
ZV1567	Firm/convincing	.33	.77
ZV1565	Clear consistent rules	.32	.72
ZV1568	Keeps track of whereabouts	.23	.58

Overall maternal control, Alpha = .62

(table continues)

Paternal Coercion (Alpha = .67)

Variable	Item Description	Item-total Correlation	Factor Loading
ZV1614	Spanks/slaps	.57	.82
ZV1610	Threatens	.54	.73
ZV1608	Sends to room	.34	.65

Paternal Rejection (Alpha = .53)

Variable	Item Description	Item-total Correlation	Factor Loading
ZV1616	Argue with him	.33	.78
ZV1612	Says he doesn't love you	.38	.66
ZV1611	Yells at you	.32	.59
ZV1609	Makes fun of you	.26	.44

Paternal Withdrawal of Privileges

Variable	Item Description	Item-total Correlation	Factor Loading
ZV1613	Removes privileges	1.00	.56

Paternal Permissivemess (Alpha = .63)

Variable	Item Description	Item-total Correlation	Factor Loading
ZV1624	Firm/convincing	.47	.74
ZV1622	Clear consistent rules	.46	.73
ZV1625	Keeps track of whereabouts	.38	.66

Overall paternal control, Alpha = .67

Table 7

Correlations Between Parental Support and Control Measures - 1976

	M INTRINSIC SUPPORT	M EXTRINSIC SUPPORT	M TIME/CLOSENESS	F INTRINSIC SUPPORT	F TIME/CLOSENESS	M COERCION	M REJECTION	M W/DRAW PRIV	M PERMISSIVENESS	F COERCION	F REJECTION
M INTRINSIC SUPPORT	1.0										
M EXTRINSIC SUPPORT	.15	1.0									
M TIME/CLOSENESS	.00	-.09	1.0								
F INTRINSIC SUPPORT	.27	.02	.17	1.0							
F TIME/CLOSENESS	-.01	.04	.47	.13	1.0						
M COERCION	.07	.05	-.01	.00	.08	1.0					
M REJECTION	-.11	.04	-.06	-.07	.00	.03	1.0				
M W/DRAW PRIV	.10	.05	-.07	.03	-.08	.09	.09	1.0			
M PERMISSIVENESS	-.05	.06	.03	-.02	.06	-.12	-.03	-.18	1.0		
F COERCION	.02	.00	.14	.04	.05	.37	.05	.08	-.11	1.0	
F REJECTION	.01	.04	-.04	-.02	-.04	.04	.17	.06	.03	.04	1.0

Table 8

Correlations Between Parental Support and Control Measures - 1981

	M INT SUP	M EXT SUP	M TIME/CL	F INT SUP	F EXT SUP	F TIME/CL	M COERCE	M REJECT	M W/DR PR	M PERMIS	F COERCE	F REJECT	F W/DR PR	F PERMIS
M INT SUP	1.0													
M EXT SUP	.39	1.0												
M TIME/CL	.50	.41	1.0											
F INT SUP	.55	.23	.31	1.0										
F EXT SUP	.33	.64	.28	.45	1.0									
F TIME/CL	.26	.18	.43	.58	.39	1.0								
M COERCE	-.07	.05	-.14	-.02	.09	-.04	1.0							
M REJECT	-.25	-.16	-.38	-.07	-.12	-.24	.29	1.0						
M W/DR PR	.04	.05	-.03	.01	.13	-.06	.32	.19	1.0					
M PERMIS	-.38	-.20	-.23	-.24	-.22	-.16	-.10	.02	-.13	1.0				
F COERCE	.00	.05	-.05	-.08	.07	-.08	.71	.16	.31	-.09	1.0			
F REJECT	-.08	-.03	-.13	-.33	-.12	-.44	.22	.46	.28	-.03	.25	1.0		
F W/DR PR	.06	.02	-.02	.11	.12	-.01	.23	.09	.64	-.08	.35	.20	1.0	
F PERMIS	-.23	-.09	-.19	-.43	-.23	-.28	-.10	.00	-.12	.48	-.15	.05	-.21	1.0

Table 9

Correlations Between Parental Support Measures Over Time

	M INT SUP 1976	M EXT SUP 1976	M TIME/CLOS 1976	F INT SUP 1976	F TIME/CLOS 1976	M INT SUP 1981	M EXT SUP 1981	M TIME/CLO 1981	F INT SUP 1981	F EXT SUP 1981	F TIME/CLO 1981	M INT SUP 1987	F INT SUP 1987
M INT SUP 1976	1.0												
M EXT SUP 1976	.15	1.0											
M TIME/CLO 1976	.00	-.09	1.0										
F INT SUP 1976	.27	.02	.17	1.0									
F TIME/CLO 1976	-.01	.04	.47	.13	1.0								
M INT SUP 1981	.19	.06	.15	.01	.09	1.0							
M EXT SUP 1981	.21	.18	-.02	.04	.01	.39	1.0						
M TIME/CLO 1981	.19	.05	.16	.05	.06	.50	.41	1.0					
F INT SUP 1981	.16	.11	.07	.07	.08	.55	.23	.31	1.0				
F EXT SUP 1981	.18	.20	-.03	.04	.03	.33	.64	.28	.46	1.0			
F TIME/CLO 1981	.10	.05	.04	.09	.09	.26	.18	.43	.59	.39	1.0		
M INT SUP 1987	.09	.04	.07	.00	.13	.22	.18	.28	.13	.15	.11	1.0	
F INT SUP 1987	.04	.03	.08	.10	.09	.16	.13	.11	.32	.24	.42	.33	1.0

Table 10

Correlations Between Parental Control Measures Over Time

	M COERCION 1976	M REJECTION 1976	M W/DRAW PRIV 1976	M PERMISSIVE 1976	F COERCION 1976	F REJECTION 1976	M COERCION 1981	M REJECTION 1981	M W/DRAW PRIV 1981	M PERMISSIVE 1981	F COERCION 1981	F REJECTION 1981	F W/DRAW PRIV 1981	F PERMISSIVE 1981
M COERCION 1976	1.0													
M REJECTION 1976	.03	1.0												
M W/DRAW PRIV 1976	.09	.09	1.0											
M PERMISSIVE 1976	-.12	-.03	-.18	1.0										
F COERCION 1976	.37	.05	.08	-.11	1.0									
F REJECTION 1976	.06	.10	.06	.10	.03	1.0								
M COERCION 1981	.21	.03	.06	.05	.05	.06	1.0							
M REJECTION 1981	.08	.29	.00	-.03	.04	.10	.29	1.0						
M W/DRAW PRIV 1981	.20	.03	.00	-.07	.03	.06	.32	.19	1.0					
M PERMISSIVE 1981	-.11	.02	.00	.08	.00	.10	-.10	.02	-.13	1.0				
F COERCION 1981	.21	-.01	.07	.03	.02	.03	.71	.16	.31	-.09	1.0			
F REJECTION 1981	.09	.10	.08	-.04	.05	.04	.22	.46	.28	-.03	.25	1.0		
F W/DRAW PRIV 1981	.10	.05	.20	-.01	-.02	.09	.22	.09	.64	-.08	.35	.20	1.0	
F PERMISSIVE 1981	-.05	-.03	-.09	.04	-.06	.02	-.10	.00	-.12	-.48	-.15	.05	-.21	1.0

Table 11

Child's Report of Self-Esteem - 1976[a]

Variable	Item Description	Item-total Correlation
V5797	I am lucky	.16
V5798	I wish I were someone else	.32
V5799	I am easy to like	.28
V5800	I make up my mind w/out much trouble	.23
V5801	I don't like being a boy/girl	.27
V5802	Kids usually follow my ideas	.21
V5803	I don't like being with other people	.20
V5804	I can do many things well	.31
V5806	Sometimes I just can't learn	.19
V5807	I like being the way I am	.33
V5808	I do many bad things	.24
		Alpha = .57

[a](Items are recoded so that a high score reflects positive self-esteem).

Table 12

Child's Report of Self-Esteem - 1981[a]

Variable	Item Description	Inter-Item Correlation
ZV1920	Perception of physical health status	.28
ZV1921	Perception of underweight/overweight	.16
ZV1922	Perception of looks compared to peers	.17
ZV1955	Satisfied with school work	.26
ZV1956	Satisfied with friends	.29
ZV1957	Satisfied with family	.41
ZV1958	Satisfied with yourself	.49
ZV1959	Satisfied with being boy/girl	.33
ZV1961	Perception of how life is going	.40

Alpha = .61

[a](Items are recoded so that a high score reflects positive self-esteem).

Table 13

Youth's Report of Self-Esteem - 1987[a]

Variable	Item Description	Item-total Correlation
Y871759	I am a person of worth	.21
Y871760	Not much to be proud of	.32
Y871761	My life has not been useful	.34
Y871762	I like being the way I am	.26
Y871763	I can do many things well	.32
Y871764	I think I am not good at all	.27
		Alpha = .53

[a](Items are recoded so that a high score reflects positive self-esteem).

Table 14

Parent's Report of Child Behavior Problems - 1976[a]

Internal Behavior Problems

Variable	Item Description	Item-total Correlation
V5489	Child unenthusiastic/uninterested	.34
V5493	Child is easily confused	.34
V5494	Child is unhappy/not cheerful	.33
V5498	Child is alone too much	.32
V5499	Child is timid/afraid	.41

(Alpha = .59)

External Behavior Problems

Variable	Item Description	Item-total Correlation
V5490	Child fights, teases, bullies	.43
V5492	Child often tells lies	.47
V5495	Child breaks and destroys things	.41
V5496	Child acts young, cries, tantrums	.42
V5497	Child is restless, fidgets	.46

Alpha = .65

[a](Items are recoded so that a high score reflects a high level of behavior problems).

Table 15

Parent's Report of Child Behavior Problems - 1981[a]

Internal Behavior Problems

Variable	Item Description	Item-total Correlation
V1107	Child has sudden changes of mood	.55
V1108	Child feels no one loves him/her	.50
V1109	Child high strung/tense	.56
V1111	Child too fearful/anxious	.54
V1113	Child has difficulty concentrating	.50
V1114	Child easily confused	.52
V1120	Child feels inferior	.59
V1122	Child has obsessions	.53
V1126	Child unhappy/depressed	.59
V1127	Child withdrawn	.45
V1128	Child feels others out to get him/her	.45
V1130	Child secretive	.37
V1131	Child worries too much	.44

Alpha = .85

External Behavior Problems

Variable	Item Description	Item-total Correlation
V1110	Child cheats/lies	.51
V1112	Child argues too much	.54
V1115	Child bullies	.48
V1116	Child disobedient at home	.59
V1117	Child disobedient at school	.50
V1118	Child not sorry after misbehaving	.31
V1119	Child impulsive	.53
V1121	Child not liked by other children	.40
V1123	Child is restless/overly active	.46
V1124	Child is stubborn/irritable	.55
V1125	Child has a strong temper	.53
V1129	Child hangs out w/kids in trouble	.46

Alpha = .83

[a](Items are recoded so that a high score reflects a high level of behavior problems).

Table 16

Parent's Report of Youth Behavior Problems - 1987[a]

Internal Behavior Problems

Variable	Item Description	Item-total Correlation
P870831	Youth feels no one loves him/her	.53
P870833	Youth is too fearful/anxious	.60
P870834	Youth has difficulty concentrating	.61
P870835	Youth is confused/in a fog	.65
P870839	Youth feels worthless/inferior	.62
P870841	Youth has obsessions	.61
P870844	Youth is unhappy/sad/depressed	.62
P870845	Youth is withdrawn/not involved	.48
P870846	Youth feels others out to get him/her	.56

Alpha = .86

External Behavior Problems

Variable	Item Description	Item-total Correlation
P870832	Youth cheats/lies	.57
P870836	Youth bullies, is cruel & mean	.47
P870837	Youth not sorry after wrongdoing	.47
P870838	Youth acts impulsive w/out thinking	.50
P870840	Youth not liked by peers	.43
P870842	Youth is restless/overly active	.48
P870843	Youth has a strong temper	.47
P870847	Youth hangs out with kids in trouble	.44

Alpha = .76

[a](Items are recoded so that a high score reflects a high level of behavior problems).

Table 17

Correlations Between Boys' and Girls' Behavior Problems Over Time

		INTERNAL BEHAVIOR PROBLEMS 1976	EXTERNAL BEHAVIOR PROBLEMS 1976	INTERNAL BEHAVIOR PROBLEMS 1981	EXTERNAL BEHAVIOR PROBLEMS 1981	INTERNAL BEHAVIOR PROBLEMS 1987	EXTERNAL BEHAVIOR PROBLEMS 1987
INTERNAL BEHAVIOR PROBLEMS 1976	BOYS	1.0					
	GIRLS	1.0					
EXTERNAL BEHAVIOR PROBLEMS 1976	BOYS	.30	1.0				
	GIRLS	.40	1.0				
INTERNAL BEHAVIOR PROBLEMS 1981	BOYS	.32	.37	1.0			
	GIRLS	.25	.24	1.0			
EXTERNAL BEHAVIOR PROBLEMS 1981	BOYS	.12	.47	.73	1.0		
	GIRLS	.22	.46	.77	1.0		
INTERNAL BEHAVIOR PROBLEMS 1987	BOYS	.33	.30	.51	.40	1.0	
	GIRLS	.32	.40	.47	.35	1.0	
EXTERNAL BEHAVIOR PROBLEMS 1987	BOYS	.11	.45	.40	.51	.63	1.0
	GIRLS	.29	.44	.43	.47	.70	1.0

Table 18

Comparison of Mothers' and Fathers' Parenting Behaviors as Perceived by Their Daughters[a]

		$\bar{X}$	r	t	df	p
INTRINSIC SUPPORT 1976[b]	MOTHERS	2.00	.43	2.30	256	.022
	FATHERS	1.98				
INTRINSIC SUPPORT 1981	MOTHERS	16.55	.52	5.85	259	.000
	FATHERS	15.78				
INTRINSIC SUPPORT 1987	MOTHERS	14.41	.38	6.26	260	.000
	FATHERS	13.12				
EXTRINSIC SUPPORT 1981	MOTHERS	6.70	.60	6.90	259	.000
	FATHERS	6.09				
TIME/CLOSENESS 1976[b]	MOTHERS	1.61	.49	.77	260	.444
	FATHERS	1.59				
TIME/CLOSENESS 1981	MOTHERS	14.09	.39	4.72	259	.000
	FATHERS	13.28				
COERCION 1976[b]	MOTHERS	3.05	.48	2.83	260	.005
	FATHERS	2.89				
COERCION 1981	MOTHERS	4.14	.69	2.54	259	.012
	FATHERS	3.97				
REJECTION 1976[b]	MOTHERS	2.35	.40	3.76	260	.000
	FATHERS	2.22				
REJECTION 1981	MOTHERS	7.14	.47	3.06	259	.002
	FATHERS	6.86				
W/DRAW PRIV 1981	MOTHERS	1.74	.50	1.80	259	.072
	FATHERS	1.67				
PERMISSIVENESS 1981	MOTHERS	4.42	.38	.88	259	.381
	FATHERS	4.35				

[a]Data not available in 1976 for comparison of extrinsic support, withdrawal of privileges, and permissiveness. Data was only available on the intrinsic support construct in 1987.

[b]The single comparable item from data on the mother was compared with that item from the fathers' data.

Table 19

Comparison of Mothers' and Fathers' Parenting Behaviors as Perceived by Their Sons[a]

		$\bar{x}$	r	t	df	p
INTRINSIC SUPPORT 1976[b]	MOTHERS	1.97	.39	.60	256	.547
	FATHERS	1.96				
INTRINSIC SUPPORT 1981	MOTHERS	16.67	.60	3.11	261	.000
	FATHERS	15.34				
INTRINSIC SUPPORT 1987	MOTHERS	13.76	.30	1.32	260	.189
	FATHERS	13.52				
EXTRINSIC SUPPORT 1981	MOTHERS	6.25	.38	4.75	261	.000
	FATHERS	5.87				
TIME/CLOSENESS 1976[b]	MOTHERS	1.73	.45	4.11	262	.000
	FATHERS	1.61				
TIME/CLOSENESS 1981	MOTHERS	14.16	.47	-2.57	261	.011
	FATHERS	14.50				
COERCION 1976[b]	MOTHERS	2.90	.51	-2.21	261	.028
	FATHERS	3.02				
COERCION 1981	MOTHERS	4.27	.51	-.46	261	.649
	FATHERS	4.30				
REJECTION 1976[b]	MOTHERS	2.37	.33	5.53	262	.000
	FATHERS	2.16				
REJECTION 1981	MOTHERS	6.85	.57	-4.05	261	.000
	FATHERS	6.64				
W/DRAW PRIV 1981	MOTHERS	1.72	.68	-.36	261	.721
	FATHERS	1.74				
PERMISSIVENESS 1981	MOTHERS	4.48	.57	4.05	261	.000
	FATHERS	4.17				

[a] Data not available in 1976 for comparison of extrinsic support, withdrawal of privileges, and permissiveness. Data was only available on the intrinsic support construct in 1987.

[b] The single comparable item from data on the mother was compared with that item from the fathers' data.

Table 20

Comparison of Boys' and Girls' Perceptions of Their Parents' Supportive Behaviors

		$\bar{x}$	sd	t	df	p
M INTRINSIC SUPPORT 1976	BOYS	5.37	.79	-2.93	511	.000
	GIRLS	5.55	.64			
F INTRINSIC SUPPORT 1976	BOYS	1.97	.20	-1.15	486	.251
	GIRLS	1.96	.16			
M EXTRINSIC SUPPORT 1976	BOYS	4.50	1.04	-1.30	530	.193
	GIRLS	4.62	1.03			
M TIME/CLOSENESS 1976	BOYS	1.73	.44	2.94	523	.003
	GIRLS	1.61	.49			
F TIME/CLOSENESS 1976	BOYS	1.61	.49	.36	523	.721
	GIRLS	1.59	.49			
M INTRINSIC SUPPORT 1981	BOYS	16.68	1.76	.82	527	.413
	GIRLS	16.55	1.79			
F INTRINSIC SUPPORT 1981	BOYS	16.34	1.94	2.94	496	.003
	GIRLS	15.78	2.41			
M EXTRINSIC SUPPORT 1981	BOYS	6.27	1.58	-3.18	527	.002
	GIRLS	6.70	1.53			
F EXTRINSIC SUPPORT 1981	BOYS	5.87	1.65	-.15	520	.138
	GIRLS	6.09	1.64			
M TIME/CLOSENESS 1981	BOYS	14.17	2.29	.30	501	.766
	GIRLS	14.12	2.31			
F TIME/CLOSENESS 1981	BOYS	14.50	2.29	5.62	508	.000
	GIRLS	14.12	2.64			
M INTRINSIC SUPPORT 1987	BOYS	13.77	2.27	-3.16	525	.002
	GIRLS	14.42	2.48			
F INTRINSIC SUPPORT 1987	BOYS	13.52	2.78	1.63	524	.104
	GIRLS	13.12	2.87			

Table 21

Comparison of Boys' and Girls' Perceptions of Their Parents' Controlling Behaviors

		$\bar{X}$	sd	t	df	p
M COERCION 1976	BOYS	4.41	1.05	-2.46	529	.014
	GIRLS	4.63	1.01			
F COERCION 1976	BOYS	3.02	.91	1.61	519	.107
	GIRLS	2.89	.98			
M REJECTION 1976	BOYS	6.23	.76	.27	525	.785
	GIRLS	6.21	.82			
F REJECTION 1976	BOYS	2.16	.42	-.13	512	.183
	GIRLS	2.22	.48			
M W/DRAW PRIV 1976	BOYS	4.75	1.02	.11	529	.916
	GIRLS	4.74	1.03			
M PERMISSIVENESS 1976	BOYS	8.81	1.79	-2.32	524	.021
	GIRLS	9.04	1.10			
M COERCION 1981	BOYS	3.02	.91	1.12	519	.107
	GIRLS	2.69	.98			
F COERCION 1981	BOYS	4.30	1.34	2.86	518	.004
	GIRLS	3.97	1.27			
M REJECTION 1981	BOYS	6.86	1.11	-2.45	500	.014
	GIRLS	7.13	1.41			
F REJECTION 1981	BOYS	6.69	1.21	-.15	509	.132
	GIRLS	6.86	1.39			
M W/DRAW PRIV 1981	BOYS	14.50	2.29	-.27	527	.787
	GIRLS	14.12	2.64			
F W/DRAW PRIV 1981	BOYS	1.73	.70	1.02	516	.308
	GIRLS	1.67	.64			
M PERMISSIVENESS 1981	BOYS	4.47	1.24	.49	527	.624
	GIRLS	4.42	2.87			
F PERMISSIVENESS 1981	BOYS	4.41	1.46	-1.47	527	.142
	GIRLS	4.29	1.42			

Table 22

Comparison of Boys' and Girls' Self-Esteem Scores[a]

	$\bar{X}$	sd	t	df	p
1976					
BOYS	19.31	1.81	1.37	527	.171
GIRLS	19.08	1.91			
1981					
BOYS	25.09	2.56	2.24	523	.026
GIRLS	24.61	2.32			
1987					
BOYS	19.00	1.79	-1.13	531	.258
GIRLS	19.17	1.79			

[a]Mean scores are only comparable within survey years; scores are not comparable between survey years, because different questions were asked.

Table 23

Comparison of Boys' and Girls' Internal and External Expressions of Behavior Problems Over Time[a]

	$\bar{X}$	sd	t	df	p
1976					
Internal Behavior Problems					
Boys	10.18	3.72			
			.14	530	.888
Girls	10.13	3.84			
External Behavior Problems					
Boys	10.89	4.10			
			1.98	521	.048
Girls	10.23	3.53			
1981					
Internal Behavior Problems					
Boys	17.02	3.65			
			-1.00	520	.316
Girls	17.36	4.16			
External Behavior Problems					
Boys	16.02	3.66			
			1.79	528	.074
Girls	15.47	3.33			
1987					
Internal Behavior Problems					
Boys	10.66	2.34			
			.06	498	.951
Girls	10.64	2.65			
External Behavior Problems					
Boys	9.54	1.96			
			-.09	500	.930
Girls	9.56	2.19			

[a]Mean scores are only comparable within survey years; scores are not comparable between years, because different questions were asked.

Table 24

Correlations Between Children's Perceptions of Parental Support and Their Self-Esteem

		SELF-ESTEEM 1976	SELF-ESTEEM 1981	SELF-ESTEEM 1987
1976				
M INTRINSIC SUPPORT				
	BOYS	.17	.21	.00
	GIRLS	.20	.05	-.01
F INTRINSIC SUPPORT				
	BOYS	.18	.24	-.02
	GIRLS	.07	-.05	.05
M EXTRINSIC SUPPORT				
	BOYS	-.06	.14	.06
	GIRLS	-.02	.00	-.11
M TIME/CLOSENES				
	BOYS	.11	-.02	.08
	GIRLS	.14	.02	.02
F TIME/CLOSENESS				
	BOYS	.05	.02	.13
	GIRLS	.13	.07	.07
1981				
M INTRINSIC SUPPORT				
	BOYS	.18	.38	.21
	GIRLS	.22	.44	.03
F INTRINSIC SUPPORT				
	BOYS	.24	.44	.20
	GIRLS	.02	.37	-.02
M EXTRINSIC SUPPORT				
	BOYS	.03	.25	-.01
	GIRLS	.09	.20	.02
F EXTRINSIC SUPPORT				
	BOYS	.03	.25	-.01
	GIRLS	.05	.29	-.06
M TIME/CLOSENESS				
	BOYS	.08	.40	-.06
	GIRLS	.25	.43	-.06
F TIME/CLOSENESS				
	BOYS	.17	.40	.07
	GIRLS	.14	.41	-.03
1987				
M INTRINSIC SUPPORT				
	BOYS	.10	.18	.25
	GIRLS	.13	.21	.21
F INTRINSIC SUPPORT				
	BOYS	.14	.29	.20
	GIRLS	.25	.12	.16

Table 25

Correlations Between Children's Perceptions of Parental Support and Internal and External Behavior Problems

		INTERNAL BEHAVIOR PROBLEMS 1976	EXTERNAL BEHAVIOR PROBLEMS 1976	INTERNAL BEHAVIOR PROBLEMS 1981	EXTERNAL BEHAVIOR PROBLEMS 1981	INTERNAL BEHAVIOR PROBLEMS 1987	EXTERNAL BEHAVIOR PROBLEMS 1987
1976							
M INTRINSIC SUPPORT							
	BOYS	-.16	-.26	-.06	-.15	-.06	-.09
	GIRLS	-.06	-.07	.01	.00	-.01	.00
F INTRINSIC SUPPORT							
	BOYS	-.06	-.25	-.13	-.16	-.16	-.18
	GIRLS	-.03	-.01	.08	.00	.03	.05
M EXTRINSIC SUPPORT							
	BOYS	-.05	.05	.09	.04	-.06	.04
	GIRLS	-.10	.05	.01	-.07	-.01	-.07
M TIME/CLOSENESS							
	BOYS	-.04	-.19	-.07	-.14	-.15	-.15
	GIRLS	-.01	-.15	-.04	-.07	-.13	-.15
F TIME/CLOSENESS							
	BOYS	.06	-.06	.02	-.14	-.05	-.05
	GIRLS	.13	-.03	.10	.05	.05	-.01
1981							
M INTRINSIC SUPPORT							
	BOYS	-.17	-.14	-.07	-.09	-.10	-.19
	GIRLS	-.13	-.33	-.24	-.25	-.20	-.25
F INTRINSIC SUPPORT							
	BOYS	-.17	-.15	-.07	-.13	-.07	-.13
	GIRLS	-.02	-.16	-.17	-.11	-.02	-.07
M EXTRINSIC SUPPORT							
	BOYS	-.12	-.15	-.07	-.08	-.17	-.16
	GIRLS	-.14	-.12	-.17	-.21	-.17	-.16
F EXTRINSIC SUPPORT							
	BOYS	-.06	-.06	-.11	-.12	-.10	-.17
	GIRLS	-.10	-.07	-.13	-.11	-.14	-.17
M TIME/CLOSENESS							
	BOYS	-.25	-.23	-.15	-.11	-.09	-.07
	GIRLS	-.19	-.30	-.25	-.27	-.22	-.26
F TIME/CLOSENESS							
	BOYS	-.13	-.07	-.05	-.11	-.05	-.02
	GIRLS	-.12	-.12	-.29	-.20	-.08	-.15
1987							
M INTRINSIC SUPPORT							
	BOYS	-.03	-.14	-.01	-.08	-.05	-.04
	GIRLS	-.05	-.13	-.03	-.15	-.10	-.07
F INTRINSIC SUPPORT							
	BOYS	-.04	-.09	-.04	-.16	-.08	-.19
	GIRLS	-.07	-.06	-.03	-.13	-.06	-.19

Table 26

Correlations Between Children's Perceptions of Parental Control and Their Self-Esteem[a]

		SELF-ESTEEM 1976	SELF-ESTEEM 1981	SELF-ESTEEM 1987
1976				
M COERCION				
	BOYS	.07	.01	-.04
	GIRLS	.08	-.02	.12
F COERCION				
	BOYS	.11	.05	-.05
	GIRLS	.00	-.17	.11
M REJECTION				
	BOYS	-.23	-.13	-.04
	GIRLS	-.20	-.10	-.05
F REJECTION				
	BOYS	-.09	-.11	-.08
	GIRLS	-.07	-.04	-.16
M W/DRAW PRIV				
	BOYS	-.01	.11	.14
	GIRLS	-.07	-.10	-.05
M PERMISSIVENESS				
	BOYS	.03	.08	.00
	GIRLS	.05	.09	.07
1981				
M COERCION				
	BOYS	-.09	-.12	-.12
	GIRLS	-.17	-.13	-.04
F COERCION				
	BOYS	-.11	-.11	-.02
	GIRLS	-.06	-.02	-.04
M REJECTION				
	BOYS	-.07	-.19	.00
	GIRLS	-.29	-.19	-.08
F REJECTION				
	BOYS	-.13	-.16	.08
	GIRLS	-.15	-.29	-.13
M W/DRAW PRIV				
	BOYS	.04	.03	.00
	GIRLS	-.08	-.10	-.17
F W/DRAW PRIV				
	BOYS	.06	.04	.05
	GIRLS	-.02	.01	-.08
M PERMISSIVENESS				
	BOYS	.01	-.12	-.04
	GIRLS	-.16	-.25	.09
F PERMISSIVENESS				
	BOYS	-.12	-.15	-.06
	GIRLS	.08	-.25	-.04

[a] Data were not available on parental control measures for 1987.

Table 27

Correlations Between Children's Perceptions of Parental Control and Internal and External Behavior Problems

	INTERNAL BEHAVIOR PROBLEMS 1976	EXTERNAL BEHAVIOR PROBLEMS 1976	INTERNAL BEHAVIOR PROBLEMS 1981	EXTERNAL BEHAVIOR PROBLEMS 1981	INTERNAL BEHAVIOR PROBLEMS 1987	EXTERNAL BEHAVIOR PROBLEMS 1987
1976						
M COERCION						
BOYS	-.07	.05	-.05	.04	.01	-.01
GIRLS	-.11	.12	.09	.02	.08	.04
F COERCION						
BOYS	-.17	-.13	-.16	-.07	-.07	.04
GIRLS	.06	.02	.06	-.01	.11	.11
M REJECTION						
BOYS	.03	.16	.16	.31	.17	.19
GIRLS	.03	.22	.22	.24	.23	.22
F REJECTION						
BOYS	-.03	.11	.02	.11	.02	.09
GIRLS	.06	.11	.06	.12	-.02	-.02
M W/DRAW PRIV						
BOYS	-.18	-.01	-.01	.08	-.04	-.09
GIRLS	.04	.04	.01	-.02	.10	.04
M PERMISSIVENESS						
BOYS	.04	.02	.20	.02	.06	.04
GIRLS	-.04	-.05	.04	.06	.02	-.04
1981						
M COERCION						
BOYS	-.03	.08	.10	.15	.12	.10
GIRLS	.11	.16	.27	.26	.20	.21
F COERCION						
BOYS	-.05	-.01	.01	.06	.04	-.02
GIRLS	.01	.07	.16	.14	.01	-.02
M REJECTION						
BOYS	.10	.16	.13	.17	.14	.07
GIRLS	.19	.29	.34	.41	.38	.44
F REJECTION						
BOYS	.04	.01	.12	.14	.09	.02
GIRLS	.02	.12	.25	.17	.12	.19
M W/DRAW PRIV						
BOYS	-.12	.03	-.07	.06	-.02	.03
GIRLS	.00	-.02	.09	.19	.10	.23
F W/DRAW PRIV						
BOYS	-.03	.00	-.14	.03	-.05	.03
GIRLS	-.05	-.01	-.03	.06	-.01	.06
M PERMISSIVENESS						
BOYS	.03	.08	.07	.01	.01	.06
GIRLS	.03	.16	.06	.01	.05	.01
F PERMISSIVENESS						
BOYS	.08	-.17	.09	.10	.08	.20
GIRLS	.10	.10	.09	.07	.06	.10

Table 28

Correlations Between Children's Self-Esteem Scores and Internal and External Behavior Problems

		INTERNAL BEHAVIOR PROBLEMS 1976	EXTERNAL BEHAVIOR PROBLEMS 1976	INTERNAL BEHAVIOR PROBLEMS 1981	EXTERNAL BEHAVIOR PROBLEMS 1981	INTERNAL BEHAVIOR PROBLEMS 1987	EXTERNAL BEHAVIOR PROBLEMS 1987
SELF-ESTEEM 1976	BOYS	-.09	-.14	-.13	-.24	-.07	-.09
	GIRLS	-.11	-.19	-.11	-.17	-.13	-.16
SELF-ESTEEM 1981	BOYS	-.22	-.10	-.17	-.12	-.12	-.02
	GIRLS	-.17	-.13	-.23	-.19	-.17	-.19
SELF-ESTEEM 1987	BOYS	-.12	-.07	-.10	-.15	-.27	-.16
	GIRLS	-.03	-.04	-.08	-.05	-.15	-.15

APPENDIX B. TABLES AND FIGURES FOR LISREL ANALYSES

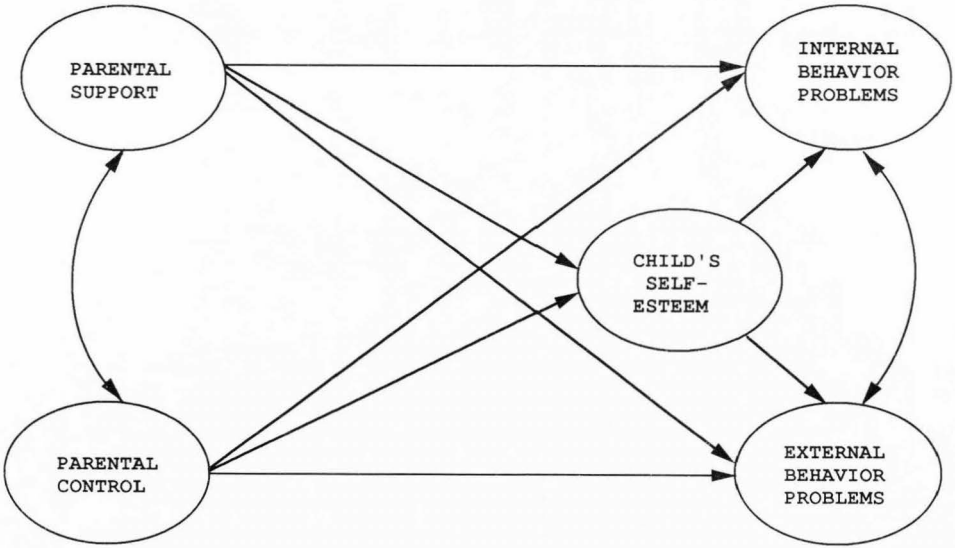

Figure 1. Inner model showing the theoretical relationships between parental support and control and children's self-esteem, internal behavior problems, and external behavior problems.

Table 29

Items Included in LISREL Analyses for Wave 2 (1981) Data[a]

Child's Report of Maternal Support	
ZV1569	Encourages to do best
ZV1570	Appreciates accomplishments
ZV1571	Loves/interested in you
ZV1550	If you're wrong/talk
ZV1566	Trusts you
ZV1546	If you are good/pleased
Child's Report of Maternal Coercion	
ZV1557	Spanks/slaps
ZV1553	Threatens
ZV1551	Sends to room
Child's Report of Maternal Rejection	
ZV1552	Makes fun of you
ZV1555	Says she doesn't love you
ZV1554	Yells at you
ZV1559	Argue with her
Child's Report of Maternal Permissiveness	
ZV1567	Firm/convincing
ZV1565	Clear consistent rules
ZV1568	Keeps track of whereabouts
Child's Report of Paternal Support	
ZV1628	Loves/interested in you
ZV1626	Encourages to do best
ZV1627	Appreciates accomplishments
ZV1623	Trusts you
ZV1607	If you're wrong/talk
ZV1574	If you are good/pleased
Child's Report of Paternal Coercion	
ZV1614	Spanks/slaps
ZV1610	Threatens
ZV1608	Sends to room
Child's Report of Paternal Rejection	
ZV1616	Argue with him
ZV1612	Says he doesn't love you
ZV1611	Yells at you
ZV1609	Makes fun of you

(table continues)

Child's Report of Paternal Permissivemess

ZV1624	Firm/convincing
ZV1622	Clear consistent rules
ZV1625	Keeps track of whereabouts

Child's Report of Self-Esteem

ZV1955	Satisfied with school work
ZV1956	Satisfied with friends
ZV1957	Satisfied with family
ZV1958	Satisfied with yourself
ZV1959	Satisfied with being boy/girl
ZV1961	Perception of how life is going

Parent's Report of Child Behavior Problems

Internal Behavior Problems

V1107	Child has sudden changes of mood
V1108	Child feels no one loves him/her
V1109	Child high strung/tense
V1111	Child too fearful/anxious
V1113	Child has difficulty concentrating
V1114	Child easily confused
V1120	Child feels inferior
V1122	Child has obsessions
V1126	Child unhappy/depressed
V1127	Child withdrawn
V1128	Child feels others out to get him/her
V1130	Child secretive
V1131	Child worries too much

External Behavior Problems

V1110	Child cheats/lies
V1112	Child argues too much
V1115	Child bullies
V1116	Child disobedient at home
V1117	Child disobedient at school
V1118	Child not sorry after misbehaving
V1119	Child impulsive
V1121	Child not liked by other children
V1123	Child is restless/overly active
V1124	Child is stubborn/irritable
V1125	Child has a strong temper
V1129	Child hangs out w/kids in trouble

---

[a]Although all of the above items were selected for analyses, only those identifed by the LISREL program as being good indicators of the construct were retained for each model.

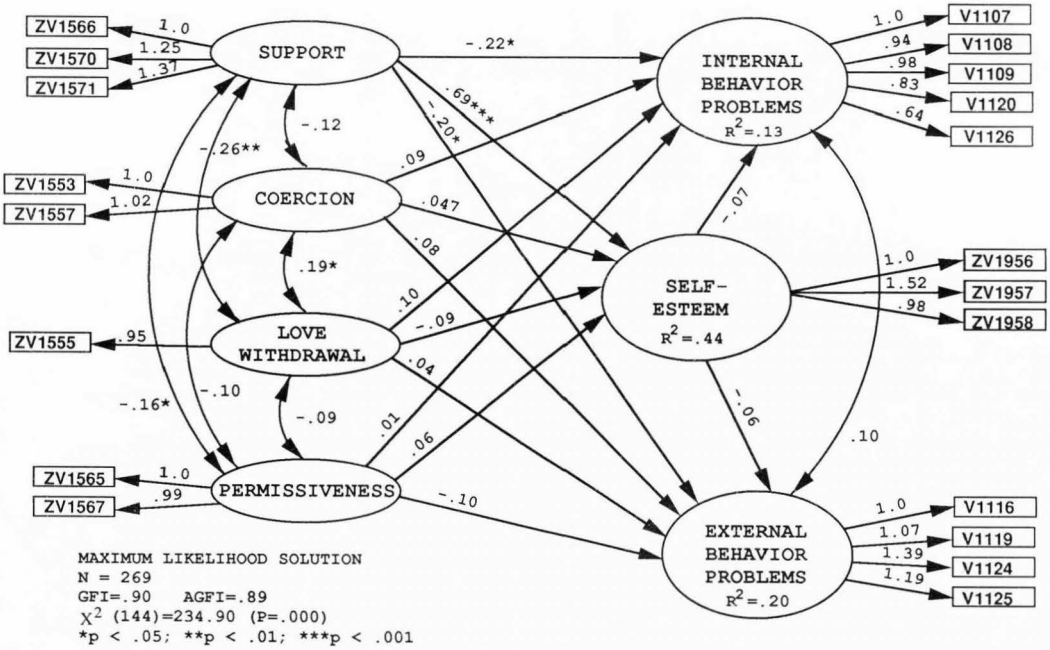

Figure 2. The effects of maternal support and control on adolescent daughters' self-esteem and internal and external behavior problems.

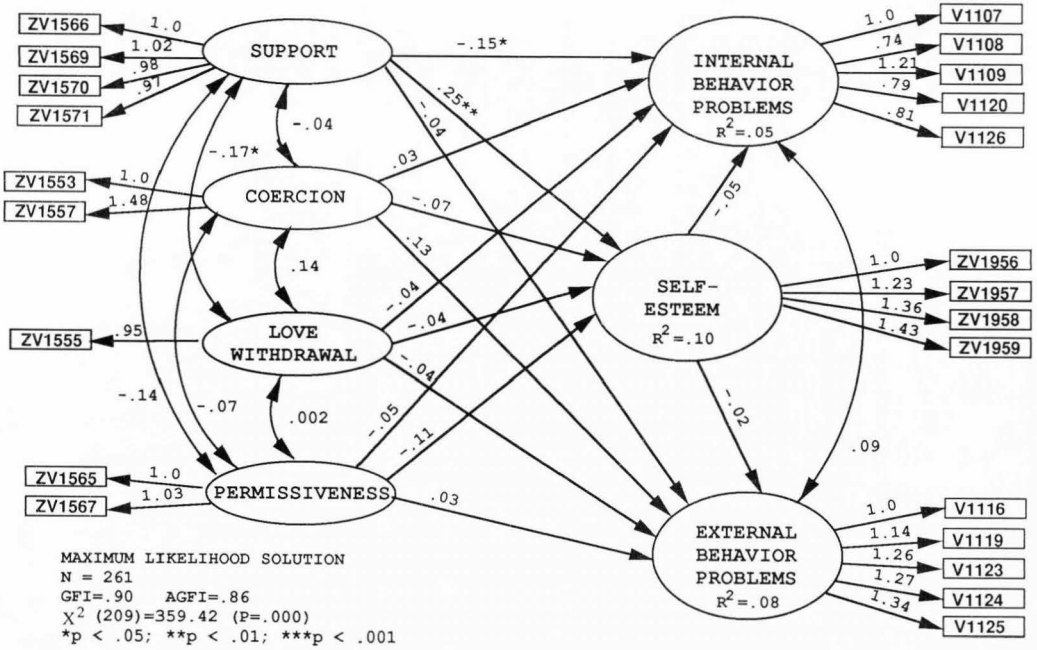

Figure 3. The effects of maternal support and control on adolescent sons' self-esteem and internal and external behavior problems.

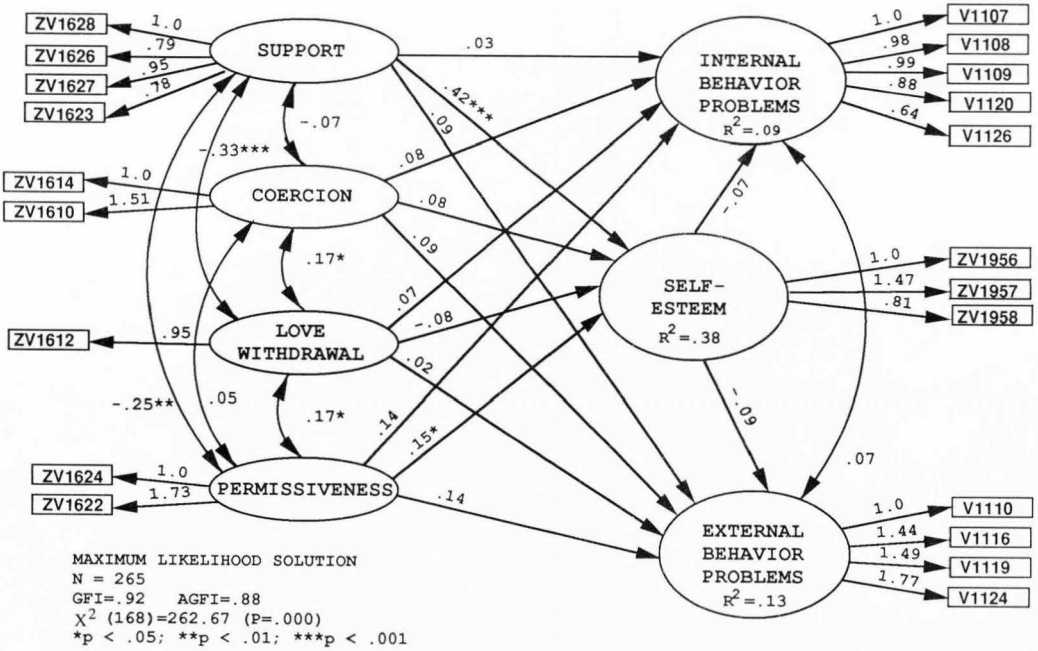

Figure 4. The effects of paternal support and control on adolescent daughters' self-esteem and internal and external behavior problems.

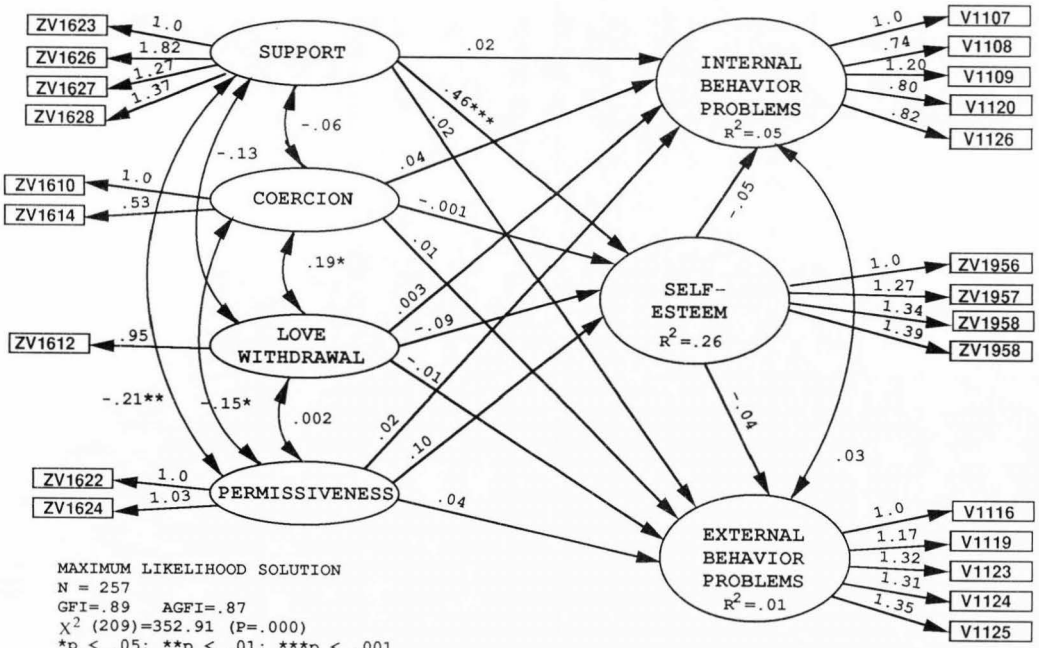

Figure 5. The effects of paternal support and control on adolescent sons' self-esteem and internal and external behavior problems.

Table 30

Items Included in LISREL Analyses for Wave 3 (1987) Data[a]

Youth's Report of Maternal Support

ZY871318	Closeness to mother
ZY871320	Share ideas w/mother
ZY871319	Want to be like mother
ZY871321	Right amount of love

Youth's Report of Paternal Support

ZY871328	Closeness to father
ZY871329	Want to be like father
ZY871330	Share ideas w/father
ZY871331	Right amount of love

Youth's Report of Self-Esteem

Y871759	I am a person of worth
Y871760	I do not have much to be proud of
Y871761	My life has not been useful
Y871762	I like being the way I am
Y871763	I can do many things well
Y871764	I think I am not good at all

Parent's Report of Youth Behavior Problems

Internal Behavior Problems

P870831	Youth feels no one loves him/her
P870833	Youth is too fearful/anxious
P870834	Youth has difficulty concentrating
P870835	Youth is confused/in a fog
P870839	Youth feels worthless/inferior
P870841	Youth has obsessions
P870844	Youth is unhappy/sad/depressed
P870845	Youth is withdrawn/not involved
P870846	Youth feels others out to get him/her

External Behavior Problems

P870832	Youth cheats/lies
P870836	Youth bullies, is cruel & mean
P870837	Youth not sorry after wrongdoing
P870838	Youth acts impulsive w/out thinking
P870840	Youth not liked by peers
P870842	Youth is restless/overly active
P870843	Youth has a strong temper
P870847	Youth hangs out with kids in trouble

[a]Although all of the above items were selected for analyses, only those identifed by the LISREL program as being good indicators of the construct were retained for each model.

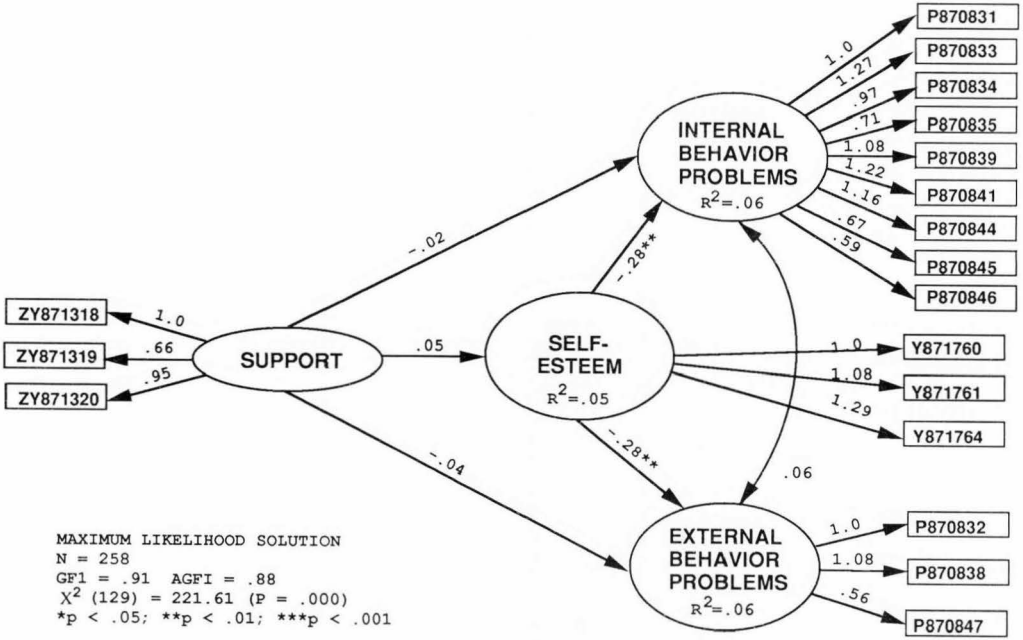

Figure 6. The effects of maternal support on young adult daughters' self-esteem and internal and external behavior problems.

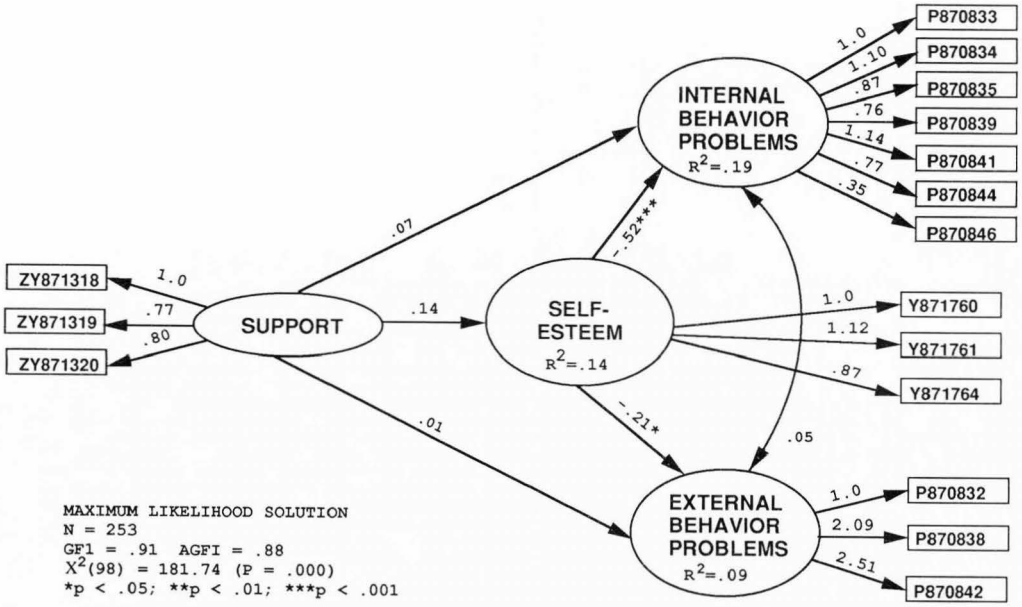

Figure 7. The effects of maternal support on young adult sons' self-esteem and internal and external behavior problems.

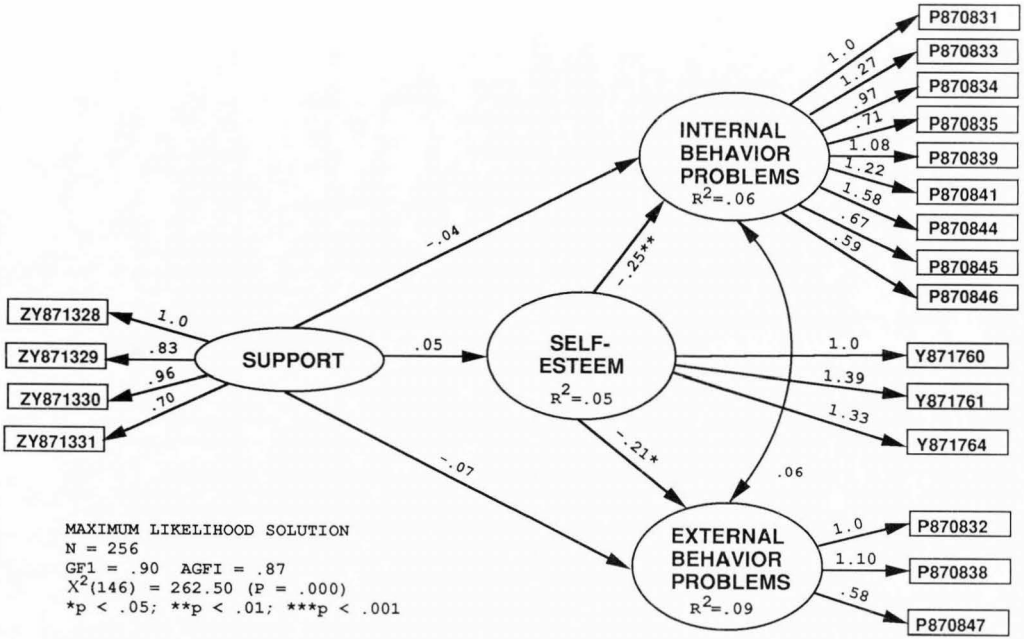

Figure 8. The effects of paternal support on young adult daughters' self-esteem and internal and external behavior problems.

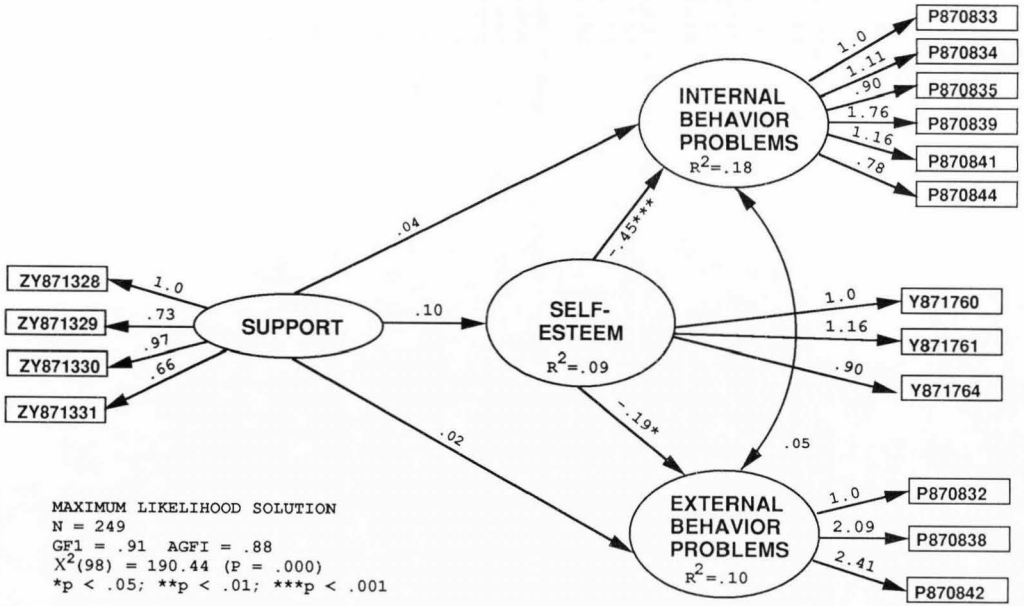

Figure 9. The effects of paternal support on young adult sons' self-esteem and internal and external behavior problems.

Table 31

Items Included in LISREL Analyses Examining the Effects of Parental Support and Control in 1981 on Children's Self-Esteem and Behavior Problems in 1987[a]

Child's Report of Maternal Support - 1981	
ZV1569	Encourages to do best
ZV1570	Appreciates accomplishments
ZV1571	Loves/interested in you
ZV1550	If you're wrong/talk
ZV1566	Trusts you
ZV1546	If you are good/pleased
Child's Report of Maternal Coercion - 1981	
ZV1557	Spanks/slaps
ZV1553	Threatens
ZV1551	Sends to room
Child's Report of Maternal Rejection - 1981	
ZV1552	Makes fun of you
ZV1555	Says she doesn't love you
ZV1554	Yells at you
ZV1559	Argue with her
Child's Report of Maternal Permissiveness - 1981	
ZV1567	Firm/convincing
ZV1565	Clear consistent rules
ZV1568	Keeps track of whereabouts
Child's Report of Paternal Support - 1981	
ZV1628	Loves/interested in you
ZV1626	Encourages to do best
ZV1627	Appreciates accomplishments
ZV1623	Trusts you
ZV1607	If you're wrong/talk
ZV1574	If you are good/pleased
Child's Report of Paternal Coercion 1981	
ZV1614	Spanks/slaps
ZV1610	Threatens
ZV1608	Sends to room

(table continues)

Child's Report of Paternal Rejection - 1981

ZV1616	Argue with him
ZV1612	Says he doesn't love you
ZV1611	Yells at you
ZV1609	Makes fun of you

Child's Report of Paternal Permissivemess - 1981

ZV1624	Firm/convincing
ZV1622	Clear consistent rules
ZV1625	Keeps track of whereabouts

Youth's Report of Self-Esteem - 1987

Y871759	I am a person of worth
Y871760	I do not have much to be proud of
Y871761	My life has not been useful
Y871762	I like being the way I am
Y871763	I can do many things well
Y871764	I think I am not good at all

Parent's Report of Youth Behavior Problems - 1987

Internal Behavior Problems

P870831	Youth feels no one loves him/her
P870833	Youth is too fearful/anxious
P870834	Youth has difficulty concentrating
P870835	Youth is confused/in a fog
P870839	Youth feels worthless/inferior
P870841	Youth has obsessions
P870844	Youth is unhappy/sad/depressed
P870845	Youth is withdrawn/not involved
P870846	Youth feels others out to get him/her

External Behavior Problems

P870832	Youth cheats/lies
P870836	Youth bullies, is cruel & mean
P870837	Youth not sorry after wrongdoing
P870838	Youth acts impulsive w/out thinking
P870840	Youth not liked by peers
P870842	Youth is restless/overly active
P870843	Youth has a strong temper
P870847	Youth hangs out with kids in trouble

---

[a]Although all of the above items were selected for analyses, only those identifed by the LISREL program as being good indicators of the construct were retained for each model.

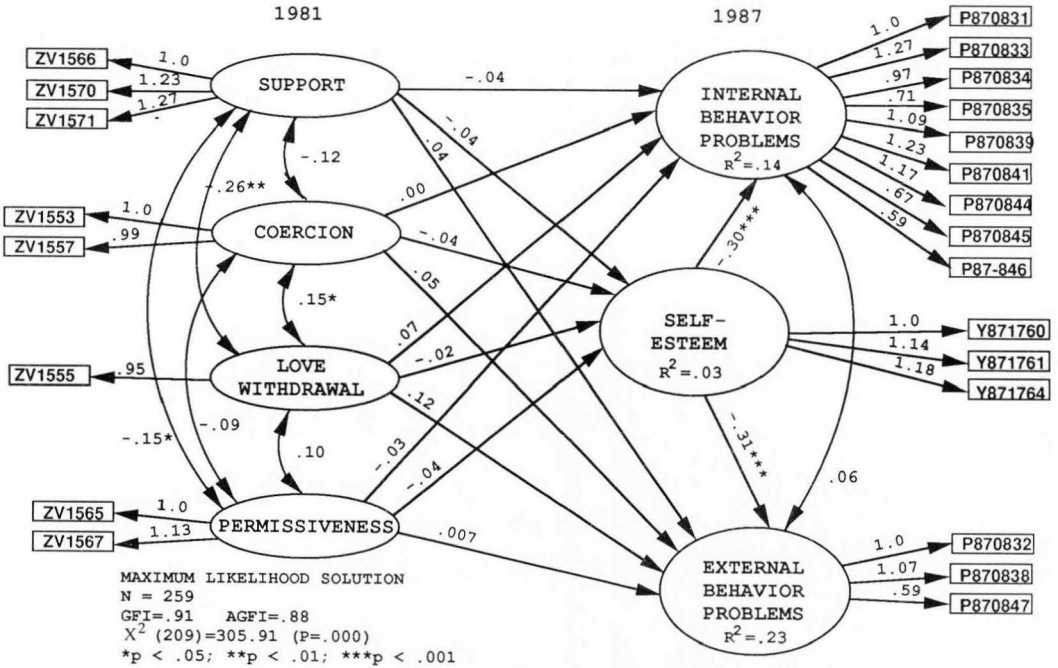

Figure 10. The effects of maternal support and control in 1981 on daughters' self-esteem and internal and external behavior problems in 1987.

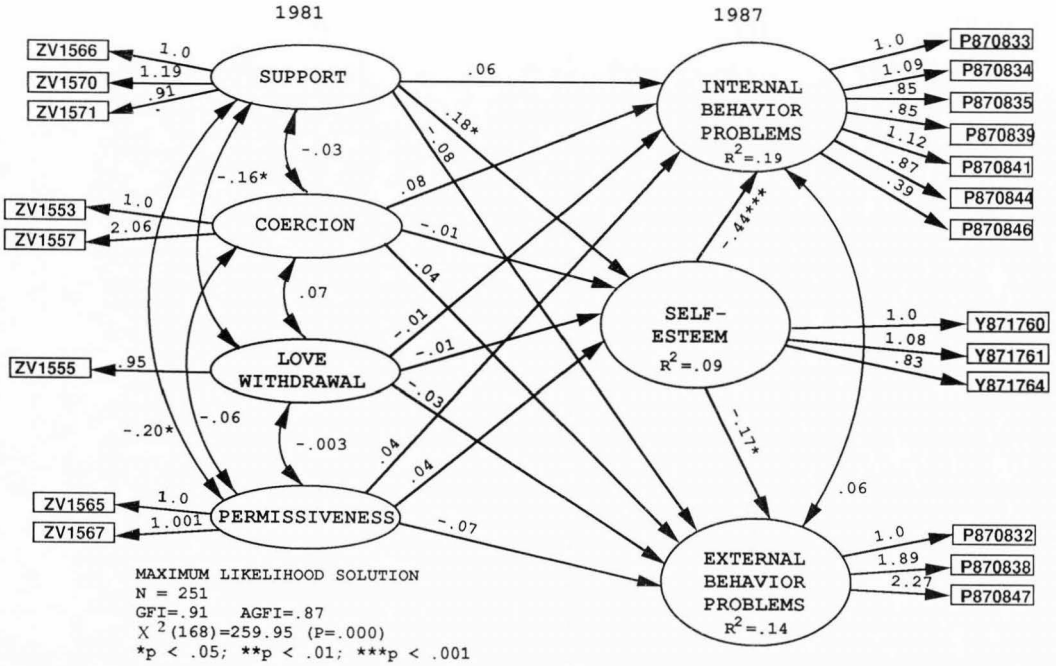

Figure 11. The effects of maternal support and control in 1981 on sons' self-esteem and internal and external behavior problems in 1987.

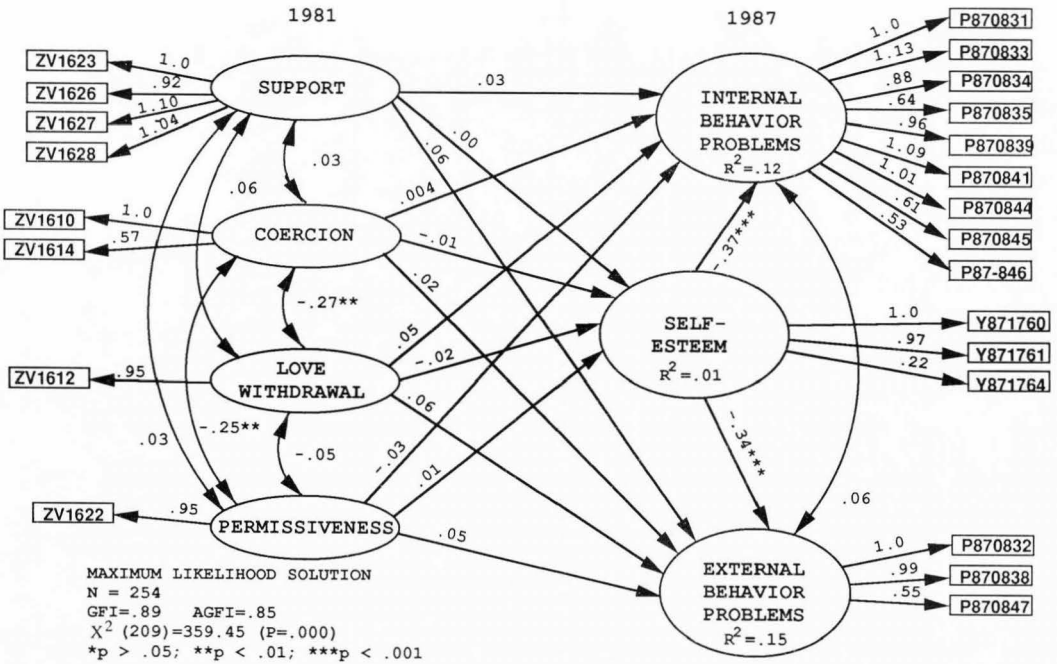

Figure 12. The effects of paternal support and control in 1981 on daughters' self-esteem and internal and external behavior problems in 1987.

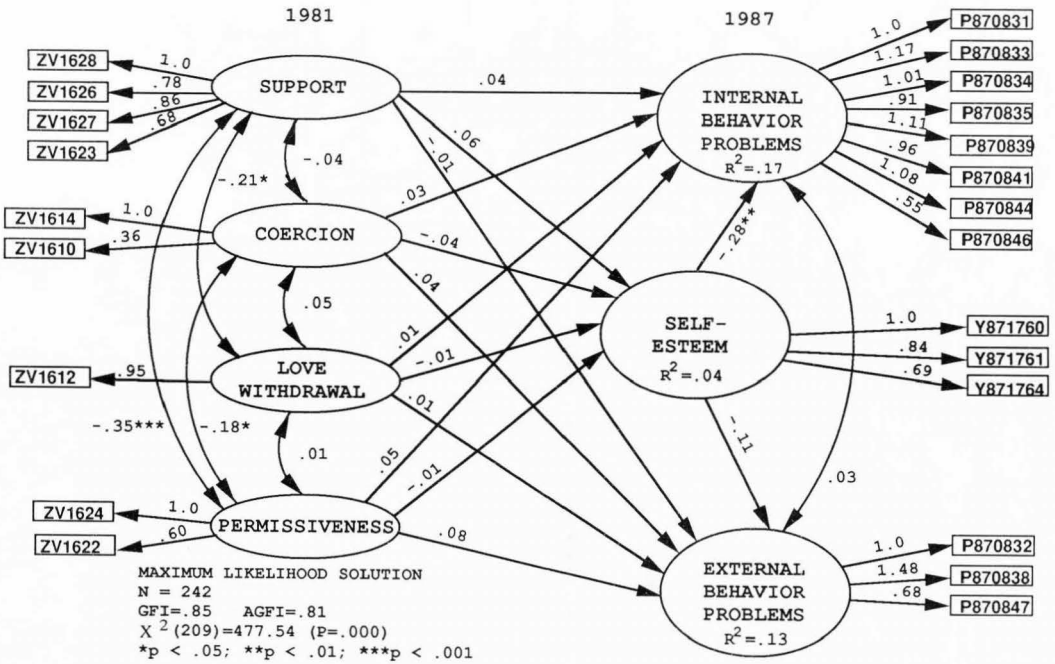

Figure 13. The effects of paternal support and control in 1981 on sons' self-esteem and internal and external behavior problems in 1987.

VITA

Margaret H. Young, Ph.D.

Home Address:
1050 No. 500 E.
Logan, UT 84321
(801) 752-5431

Business Address:
Dept. of Family & Human Development
Utah State University
Logan, UT 84322-2905

(801) 750-3829 or 750-1544

Educational Background

1964 Graduated from Holy Cross Hospital School of Nursing, Salt Lake City, UT. (Registered Nurse)

1987 Received B.S. degree in Family & Human Development, Utah State University, Logan, UT. (Emphasis - Infancy & childhood)

1989 Received M.S. degree in Family & Human Development, Utah State University, Logan, UT. (Emphasis - Marriage and family relationships)

1993 Received Ph.D. in Family & Human Development, Utah State University, Logan, UT.

Professional Experience

1964 - 1966 Registered nurse on staff at Logan LDS Hospital, Logan, UT.

1966 - 1976 Staff nurse for Charles L. Hyde, M.D., Family Practitioner, Logan, UT.

1976 - Present Staff nurse at Logan Regional Hospital, Logan, UT (primarily Labor & Delivery, Women's Health Center, and Newborn Nursery).

1987 - Present Research assistant in the Dept. of Family & Human Development, Utah State University, Logan, UT (for Dr. Jay D. Schvaneveldt and Dr. Brent C. Miller).

1989 - Present Instructor in the Dept. of Family & Human Development, Utah State University, Logan, UT (refer to teaching experience).

1990 Statistical consultant and data handling, "Identity status of student teachers". Project directed by Dr. G. R. Adams.

Teaching Experience

1987 - 1989 TA for a number of undergraduate and graduate classes. Regular instructor for the following classes:

1989 FHD 120, Marriage and the American Family
1990 FHD 386, The Child Six to Twelve
1990 FHD 120, Marriage and the American Family
1990 FHD 378, Infant Development
1991 FHD 120, Marriage and the American Family
1992 FHD 300, Death & Dying as a Family Experience
1992 FHD 120, Marriage and the American Family
1992 Co-instructor - FHD 670, Family Theory

(All of the courses listed above were offered in the Dept. of Family & Human Development, Utah State University.)

Recent Honors and Awards

1987 Outstanding Student of the Year, College of Family Life, Dept. of Family & Human Development, Utah State University.
1987 Kiwanis Outstanding Student for the College of Family Life, Utah State University.
1987 Golden Key Award, Utah State University.
1987 Phi Kappa Phi
1987 Leah D. Widstoe Scholarship
1988 Phi Omicron Upsilon
1988 Leah D. Widstoe Scholarship
1989 Phyllis R. Snow Scholarship
1989 Moen Scholarship
1989 Graduate Democracy Award, USU Faculty Women's League
1989 Presidential Fellowship, Utah State University
1990 Leah D. Widstoe Scholarship
1990 Presidential Fellowship, Utah State University

Membership in Professional Organizations

1987 - Present	Utah Council on Family Relations
1987 - Present	National Council on Family Relations
1987 - Present	Phi Kappa Phi
1988 - Present	Phi Omicron Upsilon
1992 - Present	Society for Research in Child Development
Former member	Utah Nurses' Association
Former member	National Nurses' Association

Service

1989 - 1992	Student representative for the Utah Council on Family Relations
1990	Poster Chair for the National Council on Family Relations, Seattle, WA.
1964 - Present	Numerous community programs addressing prenatal care and other child and family health issues

Current Research Projects

1989 - Present	The family at nighttime
1990 - Present	Longterm marriage
1992 - Present	Children's understanding of AIDS: A comparison of USA and Thai Children.
1992 - Present	Elective induction of labor: Effects on hospital costs and on maternal and infant outcome.
1992 - Present	Parenting style and adolescent sexual attitudes and behavior - National Survey of Children
1992 - Present	Parenting style and child behavior problems over time - National Survey of Children

PRESENTATIONS AND PUBLICATIONS

Presentations at Professional Meetings and Conferences

Young, M. H. (1988). Talking with children and youth about death and dying. Workshop presented at the 1988 Governor's Conference on Strengthening Families, Salt Lake City, UT.

Young, M. H., & Schvaneveldt, J. D. (1988). A theoretical framework for understanding the coping abilities of terminally ill school-aged children. Paper presented at the Annual Conference of the National Council on Family Relations, Philadelphia, PA.

Young, M. H., & Schvaneveldt, J. D. (1989). Mate selection in contemporary America: An exchange theory perspective. Paper presented at the pre-conference Theory Construction and Research Methodology Workshop at the Annual Conference of the National Council on Family Relations, New Orleans, LA.

Schvaneveldt, J. D., & Young, M. H. (1989). Mate selection: A cross-regional assessment. Paper presented at the Annual Conference of the National Council on Family Relations, New Orleans, LA.

Lindauer, S. L. K., Schvaneveldt, J. D., & Young, M. H. (1989). Children's understanding of AIDS: A developmental viewpoint. Paper presented at the Biennial Meeting of the Society for Research in Child Development, Kansas City, MO.

Young, M. H., & Schvaneveldt, J. D. (1991). A national study of family life education at the college level. Paper presented at the Utah Council on Family Relations, Logan, UT.

Young, M. H., & Schvaneveldt, J. D. (1991). Evaluating teaching strategies in Family Life Education at the college level. Paper presented at the Annual Conference of the National Council on Family Relations, Denver, CO.

Pickett, R. S., Young, M. H., & Schvaneveldt, J. D. (1991). Historical documents: A comparative analysis of primary sources on families. Presentation at the Annual Conference of the National Council on Family Relations, Denver, CO.

Young, M. H., & Schvaneveldt, J. D. (1992). The effects of religious orientation on couple formation among college students. Paper presented at the Annual Conference of the National Council on Family Relations, Orlando, FL.

Lindauer, S. L. K., Schvaneveldt, J. D., & Young, M. H. (1993). Understanding AIDS: A comparison of children in the United States and Thailand. Paper to be presented at the Biennial Meeting of the Society for Research in Child Development, New Orleans, LA.

Refereed Publications

Schvaneveldt, J. D., Lindauer, S. L. K., & Young, M. H. (1990). Children's understanding of AIDS: A developmental viewpoint. Family Relations, 39, 330-335.

Schvaneveldt, J. D., Pickett, R. S., & Young, M. H. (1993). Historical methods in family research. In P. Boss, W. Doherty, R. LaRossa, W. Schumm, & S. Steinmetz (Eds.), Sourcebook of family theories and methods (Ch. 4). New York: Plenum Press.

Thomas, J., Schvaneveldt, J. D., & Young, M. H. (forthcoming). Program development, implementation, and evaluation in Family Life Education. In J. D. Schvaneveldt, M. Arcus, & J. Moss (Eds.), Handbook of Family Life Education (Vol. I, Ch. 5). Beverly Hills, CA: Sage.

Schvaneveldt, J. D., & Young, M. H. (1992). Meeting crises and challenges: The role of family life education in strengthening families. Family Relations, 41, (385-389).

Non-refereed Publications

Young, M. H. (1989). Helping children understand and cope with death. Cooperative Extension Service, #EL246. Utah State University, Logan, UT.

The following articles appeared in the Family Life section of the Salt Lake Tribune between 1988 and 1991:

Young, M. H. (1988). Childhood suicide: A family crisis (Part 1 of 4). The Salt Lake Tribune, 56, Aug. 14.

Young, M. H. (1988). Childhood suicide: The family connection (Part 2 of 4). The Salt Lake Tribune, 56, Aug. 21.

Young, M. H. (1988). Childhood suicide: A cry for help (Part 3 of 4). The Salt Lake Tribune, 56, Aug. 28.

Young, M. H. (1988). Childhood suicide: Intervention and prevention (Part 4 of 4). The Salt Lake Tribune, 56, Sept. 4.

Young, M. H. (1988). Childbirth in the 80's. The Salt Lake Tribune, 56, Oct. 23.

Young, M. H. (1990). Choosing a marriage partner (Part 1 of 3). The Salt Lake Tribune, 58, Feb. 11.

Young, M. H. (1990). Calculating your marital worth (Part 2 of 3). The Salt Lake Tribune, 58, Feb. 18.

Young, M. H. (1990). Enhancing marital worth (Part 3 of 3). The Salt Lake Tribune, 58, Feb. 25.

Young, M. H. (1991). Children's clothing: A reflection of attitudes towards childhood. The Salt Lake Tribune, 59, Jan 27.

Papers in Preparation

Schvaneveldt, J. D., & Young, M. H. The inside view of longterm relationships: Assessment of perceptions of golden wedding couples.

Schvaneveldt, J. D., & Young, M. H. The family at nighttime: The other side of family life.

Schvaneveldt, J. D., Young, M. H., & Fulks, J. S. Assessing predictors of marital satisfaction in longterm marriages.

Schvaneveldt, J. D., Young, M. H., & Lindauer, S. K. L. Children's understanding of AIDS: A comparison of children in the United States and Thailand.

Young, M. H., & Schvaneveldt, J. D. Evaluating teaching strategies in family life education at the college level.

Young, M. H., & Schvaneveldt, J. D. Mate selection in contemporary America: An exchange theory perspective.

Young, M. H., & Schvaneveldt, J. D. Assessing the effects of religious orientation on couple formation among college students.

Young, M. H., & Schvaneveldt, J. D. Gender differences in the mate selection process.

Young, M. H., Schvaneveldt, J. D., & Fulks, J. S. Assessing the effects of religiosity in longterm marriages.

Masters Thesis

Young, M. H. (1989). Mate selection in contemporary America: An exchange theory perspective. Dept. of Family & Human Development, Utah State University, Logan, UT 84322-2905.

Dissertation

Young, M. H. (1993). Parenting style and child behavior problems: A longitudinal analysis. Dept. of Family & Human Development, Utah State University, Logan, UT 84322-2905.